

ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA

**ENHANCING THE PRODUCTIVITY AND COMPETITIVENESS
OF SMALL AND MEDIUM-SIZED ENTERPRISES
THROUGH CLUSTERS AND NETWORKS**

CASE STUDY: APPAREL MANUFACTURING IN LEBANON

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United Nations
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Preface

This study is part of a joint initiative programme launched by the Economic and Social Commission for Western Asia (ESCWA), the United Nations Industrial Development Organization (UNIDO) and the Euro-Med World Trade Organization Unit (EWTOU) of the Lebanese Federation of Chambers of Commerce, Industry and Agriculture.

ESCWA would like to recognize the support of the Lebanese Syndicate of Textiles and the Lebanese Syndicate of Ready Made Clothes in facilitating the implementation of the survey on apparel manufacturing in Lebanon. We would also like to thank ESCWA consultant, Mr. Bourhan Kreitem, for undertaking the survey on apparel manufacturing in Lebanon.

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I. INTRODUCTION

This study was carried out as part of an initiative launched by ESCWA and UNIDO, in collaboration with EWTOU at the Federation of Lebanese Chambers of Commerce, Industry and Agriculture, and with the support of the Lebanese syndicates of Textiles and Owners of Apparel Manufacturing Factories. The objective of the initiative is to help small and medium-sized enterprises in the apparel industry in Lebanon to become more competitive. This initiative is part of a regional initiative launched jointly by ESCWA and UNIDO. It aims to empower small and medium-sized enterprises (SMEs) in ESCWA countries through the development of different forms of collaborative inter-firm relationship, so as to enable them to harness their collective competitive advantage. This involves the development of clusters and networks of small and medium-sized enterprises, an approach that has been successfully pursued in many European and other Western countries, and has been effectively developed and applied by UNIDO over the past ten years in developing countries in Asia, Latin America, and Africa. The project in Lebanon was selected as a pilot project to be replicated in other ESCWA member countries.

The cluster approach

Clusters and networks have proved to be effective tools of industrial policy in developing and developed countries seeking to address social and economic objectives, and to enhance the competitiveness of SMEs. If SMEs in the ESCWA region are to improve their competitive advantage and integrate themselves more effectively into the global market, they must, subsequently, overcome various disadvantages associated with their isolation, size, and weak capital base. Among the main constraints facing most of these enterprises are the difficulties of access to information and finance, and the inability to meet the volume and quality of production required by foreign buyers. To surmount these difficulties and improve their competitiveness, manufacturing SMEs should seek collective inter-firm cooperative efforts in the form of interactive support within institutional settings at all stages of the production and demand chains. Accordingly, these frameworks must extend beyond the sector to include all forward and backward linkages in the production process, including, suppliers, consumers, competitors, service providers, and related or supporting industries.

International experience has shown that these frameworks offer specific and important advantages to SMEs, allowing them collectively to achieve levels of efficiency and competitiveness well beyond their reach as individual firms (referred to below as “collective efficiency” and “collective competitiveness”). Several kinds of collaborative framework exist, such as clusters, networks and other self-help groups. They all provide SMEs with a dynamic and collective competitive advantage based on innovation, learning and economies of scope.¹

Traditionally, SME support policies in developing countries were seen as a means to generate employment opportunities in the most disadvantaged sectors and thereby extend assistance to the poorest among the population.² Today, support policies targeting SME clusters and networks represent a new strategy to meet the new challenges posed by globalization and liberalization. They are a means to promote a thriving private sector and to secure more sustainable growth for SMEs. This goes well beyond the traditional development policy objectives of survival and job creation.³

In countries of the ESCWA region, very few programmes are emphasizing inter-firm cooperation and interaction, the formation of networks, and clusters or self-help groups, as a means to improve the

¹ Ceglie, Giovanna, and Dini, Marco, “SME Cluster and Network Development in Developing Countries: the Experience of UNIDO”, *International Conference on Building a Modern and Effective Development Service Industry for Small Enterprises*, International Labour Organization (ILO), The Committee of Donor Agencies for Small Enterprise Development, Rio de Janeiro, 2-5 March 1999.

² United Nations Conference on Trade and Development (UNCTAD), “Promoting and Sustaining SMEs Clusters and Networks for Development – Issues paper by the UNCTAD Secretariat, Trade and Development Board, Commission on Enterprise, Business Facilitation and Development, *Expert Group Meeting on Clustering and Networking for SME Development*, Geneva, 2-4 September 1998.

³ Ibid.

competitiveness of small firms. Instead, most support institutions and agencies dealing with SMEs concentrate on improving the performance of individual firms through advisory services, the provision of credit, and training, to upgrade technical and managerial skills. However, international experience in developed as well as in developing countries has proven that networks of firms or their clustering in one location and/or on a sectoral basis will contribute to enhancing competitiveness,⁴ and will provide the appropriate framework or vehicle for the intervention of support institutions and groups.

There are many successful international experiences from which we can draw lessons. Much has been written over the years on the Italian experience of clusters and cluster-supporting policies. Case studies included below will illustrate the craft-based nature of production in Italy, delineate the stereotypical Italian cluster, and show that, far from remaining a fixed, static system, the cluster can change and regroup under pressure. The Italian experience also demonstrates how real services can support the development and growth of a cluster. The Danish experience of networking shows that it is important to choose the means to fit the ends. It shows that short phases, early commitment to a legal agreement—the establishment of a company in most cases—and a tight timeframe are not ideal circumstances in which to develop long-term cooperation or bring about structural change.

The apparel industry: a Lebanese case study

The apparel industry was selected for examination because it plays an important role in economic development and growth in countries of the ESCWA region. The apparel industry is an important source of employment in developing countries, including those in the ESCWA region. Principles of comparative advantage naturally apply to trade in these goods. Developing countries enjoy a competitive advantage in apparel, whereas they are not as successful in textiles. Developed countries are the largest market for both textiles and clothing. The industry is currently growing, following important changes in the workings of the international market over the past decade.

Apparel manufacturing in countries of the ESCWA region is dominated by SME activities. The sector faces great difficulties in its efforts to cope with stiff competition at home and abroad, constantly changing market conditions, increasingly liberalized trade, and an unpredictable business environment. To succeed, SMEs need to undergo structural adjustments and change the way they operate, with a view to upgrading their capabilities, improving their competitiveness on the local markets, and integrating into the global market. International experience has shown that SMEs cannot face these challenges alone. To surmount these difficulties and sustain competitive advantage, apparel enterprises should seek collective inter-firm efforts in the form of clusters, networks, or other self-help groups.

The industry has existed for many years in Egypt, the Syrian Arab Republic, Iraq and Lebanon (Egyptian spinning and weaving dates back to 1920). It has lately emerged in Jordan and many countries in the Gulf Cooperation Council (GCC) sub-region as a part of efforts of governments to diversify the economy and the manufacturing sector. Currently, the industry is one of the most important in a number of countries, particularly Egypt, Jordan, Lebanon, the occupied Palestinian territory and the Syrian Arab Republic. In international trade in textiles and clothing, many major exporters, such as Egypt, the Syrian Arab Republic, and, to a lesser extent, Lebanon, are dependent on textiles and clothing for export earnings. Yet the region continues to suffer from a large balance of trade deficit in the textiles and clothing sector.

If the trade deficit is looked at from a manufacturing perspective, it represents potential growth for the industry in the region. The extent to which this potential can be realized will depend somewhat on the success of member countries in expanding their export markets, particularly within the region and in the European Union. This is all a question of the ability of regional suppliers to compete on the international market and to take advantage of new opportunities to apply innovative marketing approaches.

⁴ Pyke, Frank, *Industrial Development through Small-Firm Cooperation – Theory and Practice*, ILO (International Labour Office), Geneva, 1992.

To shed further light on the sector, a diagnostic study of the apparel manufacturing industry of Lebanon has been undertaken. It prepares the ground for the establishment of clusters/networks for the apparel manufacturing sector. These could be fostered by a technical assistance programme to bring together SMEs in apparel manufacturing to cooperate in areas of common interest—namely, product design, technology upgrading, marketing—with a view to enhancing their competitiveness in the global market. The diagnostic study seeks: (a) to identify the main features and problems facing apparel manufacturing; (b) to examine the nature and role of market linkages; and (c) to map out existing inter-firm relationships along the value chain and business practices.

Methodology of the diagnostic study

Information for the study was collected through in-depth structured interviews conducted exclusively with concerned stakeholders. The sample included apparel manufacturing SMEs, local organizations, suppliers, service providers, and associations of trade and producers. Interviewees were identified on the basis of several criteria including size, location, diversification of operation, range of manufactured products, expected sales volume, marketing channels and market intelligence. Semi-structured questionnaires, based on favoured practices by UNIDO, were developed for use as guidelines during the meetings.

Organization of the study

The study consists of seven chapters.

Chapter I, entitled “Introduction”, introduces the advantages of clusters and networks, and highlights the reasons for drawing upon international experience and for selecting apparel manufacturing for detailed analysis.

Chapter II, entitled “Clusters and Networks as a Way to Enhance the Competitiveness of SMEs: A Conceptual Framework”, identifies the problems facing SMEs in an emerging global economy, and how the collaborative inter-firm approach, in its different forms, could help enterprises to achieve collective competitiveness. The chapter introduces the concept of different forms of collaborative framework, and demonstrates that a successful initiative to develop clusters and networks is invariably a developmental programme whose impact on the business community is powerful enough to lead to the establishment of sustainable clusters.

Chapter III, entitled “International Experience of Clusters and Networks”, attempts to sum up the main features of the Italian and Danish experiences of clusters and networks. While the Italian experience is a good example of spontaneous growth of clusters in a cluster-supporting policy environment, the Danish experience is a relevant example of a publicly funded, top-down approach to network building, which has its weaknesses. The two cases show the inadvisability, under different circumstances, of imposing a cluster/network solution on enterprises by executive fiat.

Chapter IV, entitled “International Trends in Textiles and Clothing: Challenges for the ESCWA Region”, examines the important changes that the industry has been witnessing in the international market, and the serious impacts those changes will have on countries that fail to adapt quickly to these evolving market conditions. This chapter also analyses the main factors behind the new features of competitiveness in textiles and clothing in developed countries, the new dynamics of the international market, and what strategic framework is needed to address the competitiveness of exports in this industry.

Chapter V, entitled “Diagnostic Study of Apparel Manufacturing in Lebanon”, diagnoses the nature and form of existing inter-firm relations along the production chain of apparel manufacturing, and their impact on the competitiveness of the sector, identifying occurrences of collaborative inter-firm activity and the potential for cluster formation.

Chapter VI, entitled “A Framework for Fashion Cluster Development”, summarizes the aim of the joint initiative, and demonstrates the reasons behind selecting fashion for cluster development. Afterwards, it presents the main phases of implementation of the project, and the main principles that govern the joint cluster/network development initiative.

Chapter VII entitled “Conclusions” summarizes the main findings of the study and provides an outlook for future work in this area.

II. CLUSTERS AND NETWORKS AS A WAY TO ENHANCE THE COMPETITIVENESS OF SMES: A CONCEPTUAL FRAMEWORK

A. OVERVIEW

SME clusters are a noteworthy form of industrialization in developing countries, functioning as a means to improve the competitiveness of SMEs within the global economy. Clusters and networks of firms offer important advantages to SMEs, allowing them to achieve dynamic competitiveness collectively, rather than as individual enterprises. These supportive institutional settings provide the appropriate framework or vehicle for intervention by support institutions and groups.

Traditionally, SME support policies were designed to provide assistance to the poorest citizens.⁵ At present, these policies go much further. They aim to promote a thriving private sector and secure more sustainable growth for SMEs.⁶

Currently, SMEs are forced to cope with a whole nexus of problematic challenges thrown up by changing conditions on the international market, including, increasingly liberalized trade, an unpredictable, geographically expanding business environment, and increasingly stiff competition at home and abroad. Rules of the twenty-first century competition (“new competition”) are now based increasingly on flexible structures, or flexible specialization, and flexible production processes. These are governed by product-led, instead of price-led, competition, just-in-time principles, sustained innovation and innovative technologies of production involving knowledge-intensive activities including design, quality control, and new management methods based on teamwork organization, with the benefit of good working conditions, and a cooperative inter-firm infrastructure.^{7,8,9}

If SMEs in the region are not to be marginalized, if they are to become more competitive through the attainment of greater efficiencies in production, they must adapt to the new requirements of the market; acquire the skills and knowledge they need; introduce innovative changes to their products and processes; restructure their operations (namely, create leaner structures); upgrade their technology; improve working conditions; and charge affordable—competitive—prices.¹⁰ If SMEs are to sustain their competitiveness in a globalizing economy, these new rules must be assimilated as part of a continual process of change, rather than a series of end-states.

The problem with most SMEs in developing countries, including countries of the ESCWA region, involves the fact that they channel most of their energies into maintaining their narrow profit margins due to a lack in the resources with which to face the challenges of globalization. The problems of SMEs are commonly attributed to their small size. These firms fail to keep abreast of new developments or address major obstacles, let alone cluster or network their operations. As a result, they rarely attain the dynamic competitiveness which needs to be within their grasp. A growing body of evidence in developed, as well as developing countries, suggests that the problems faced by SMEs lie not in their size but rather in their ‘institutional isolation’.¹¹ This view is supported by the fact that SMEs are becoming an important component of the production system, with the emergence of “new competition” and with world trends in industrial production moving from Fordist to flexible

⁵ UNCTAD, op. cit.

⁶ UNCTAD, op. cit.

⁷ Nadvi, Khalid, *Industrial Clusters and Networks: Case Studies of SME Growth and Innovation*, United Nations Industrial Development Organization (UNIDO) Small and Medium Industries Branch, October 1995.

⁸ Economic and Social Commission for Western Asia (ESCWA), *Potential of Manufacturing Small and Medium Enterprises for Innovation in Selected ESCWA Countries*, 25 April 2001, (E/ESCWA/ID/2001/2).

⁹ Pyke, Frank, op. cit.

¹⁰ ESCWA, op. cit., 25 April 2001.

¹¹ Ceglie, Giovanna, and Dini, Marco, op. cit.

means of production.¹² It can be argued quite powerfully that, in the context of the changing conditions of competition on the international market, clusters of SMEs, far from being handicapped by size, enjoy the advantages of flexibility and responsiveness and can therefore be more competitive than large firms.

B. CONCEPTS AND DEFINITIONS¹³

Clusters, networks and industrial districts represent different types of inter-firm cooperation. In the three types, institutional collaboration is quite dynamic, as it often promotes collective learning and innovation.¹⁴ This feature of collaboration is developed with policy makers, development agencies, and providers of business development services (BDS). These relationships help to create a more favourable business environment, one that is more supportive of entrepreneurial activity and collective initiatives.

1. *Clusters and their formation*

The term ‘cluster’ is defined in this study as a sectorally and geographically concentrated group of firms that produce and sell a range of related or complementary products¹⁵ and thus face common challenges and opportunities. These opportunities give rise: (a) to external economies, such as those contingent upon the emergence of marketing agents or specialized suppliers of manufacturing inputs, or the growth of a pool of sector-specific skills in technical, financial, and accounting matters; and (b) to a network of public and private local institutions that support local economic development, promoting collective learning and innovation. However, the mere concentration of enterprises in the same location is no guarantee of success, as the advantages associated with clustering will not necessarily emerge automatically.

The evolution of a cluster is a slow process, bearing in mind that the focus of its activity is a long-term one concerned with deeper business commitments such as common marketing, information sharing, joint human resource development (training), infrastructural development, or the formation of policy. Clusters are alike insofar as they normally consist of enterprises operating in the same sector and located in a certain geographical area, but they can assume different forms, namely, artisanal, rural, micro clusters, or others.

Different types of SME clusters require a support policy of different complexions, depending on the technological intensity of the firms in the cluster, the frequency of change in the cluster, and the level of coordination among the firms.¹⁶ For example, firms in innovative clusters are knowledge-based; support to these clusters must be focused on adaptations of technology and the design of new products and processes. In traditional activities, such as textiles and garments, leather and shoes, or food processing, assistance must be given in the areas of quality improvement, standards and specifications, joint purchase of raw materials, or marketing.

In this study, the concept of ‘clustering’ refers to the overall action of establishing inter-firm relationships characterizing both networks and clusters. Clustering development services denote those services aimed at promoting the development of networks and clusters. Reference to networks will be made when it is deemed necessary to distinguish between the two concepts.

2. *Networks and their functions*

The term ‘networks’ refers to business relationships that link together geographically dispersed enterprises and their agents drawn from various sectors,¹⁷ and they are usually conceived as a tool designed

¹² Humphrey, John and Schmitz, Hubert, *Principles for Promoting Clusters and Networks of SMEs*, Discussion Paper, Number 1, UNIDO, October 1995.

¹³ Different authors adopt somewhat different definitions.

¹⁴ Ceglie, Giovanna, and Dini, Marco, op. cit.

¹⁵ Nadvi, Khalid, op. cit.

¹⁶ UNCTAD, op. cit.

¹⁷ Nadvi, Khalid, op. cit.

to attain a certain objective. As a result of this, network formation is a continuous process. Normally, networks are a group of firms that cooperate on a joint development project complementing each other and specializing in order to overcome common problems, achieve collective efficiency and conquer markets beyond their individual reach. Cooperation between firms, mutual learning and collective innovation can exist even in the absence of large clusters of firms.

Networking of SMEs is not necessarily tied to geographical proximity, yet it can still lead to collective efficiency. The external economies tend to be small but the gains from joint action can be substantial. In comparison to clusters, networks usually bring together fewer members, and can take different forms. Horizontal networks are those where inter-firm cooperation is between small firms, while vertical networks connect small and large firms, mainly through subcontracting. While soft networks are those formed for a specific transitory objective, and therefore dismantled as soon as that objective is met, hard networks are longer-term, and their existence and functions will be governed by a formal agreement such as a memorandum of understanding.¹⁸

The objective of a network could be related to quality issues and ISO certification, participation in fairs, delegations visiting other countries to get marketing experience, common procurement, or common marketing (namely, brochures). In vertical networks (including large firms subcontracting tasks to small firms) the economic benefit for large firms will be in those areas where small firms can do things better. Conversely, small firms benefit from this cooperation in terms of access to technological information and finance, assistance in purchases and sales, in organization and financial management, in quality control, and in other determinants of competitiveness.¹⁹

Horizontal cooperation between small enterprises (networking) produces collective efficiency resulting from economies of scale. This improved efficiency is seen in dealings with the public sector, investment in infrastructure, sales or purchases, benefits which accrue from the dissemination of information on markets or technology, or the division of labour. However, to realize this collective efficiency, a set of preconditions must be satisfied, particularly the existence of appropriate public services, adequate infrastructure, and relevant training facilities.²⁰

The dynamics of vertical inter-firm cooperation are succinctly analysed by Berry.²¹ In his analysis he identifies four main factors and conditions that affect or encourage productive vertical inter-firm collaboration. They include: (a) the complementary or competitive relationship among firms of different sizes; (b) the degree of outward orientation of the firms; (c) the macro-economic setting; and (d) the degree of social cohesion.

According to Berry, while complementarities between large firms and SMEs may be conducive to vertical cooperation, competitiveness between the two groups may force SMEs to cooperate among themselves. On the other hand, raising the efficiency of SMEs through specialization increases the benefits of cooperation across firm sizes. Inter-firm cooperation is liable to be easier and its pay-off to be greater if firms are outward-oriented, namely, exporting their products outside the country or the region. A phenomenon of particular relevance to countries and regions suffering from recurring problems of economic instability, such as Latin America, is the increased level of efficiency resulting from inter-firm cooperation. A corollary of this greater efficiency may well be an increased level of dependence among those firms, leading to greater vulnerability to macro-economic instability.

¹⁸ UNIDO, Unpublished materials, *Expert Group Meeting on Cluster and Network Development with Special Emphasis on Impact Assessment*, New Delhi, December 2002.

¹⁹ Berry, Albert, *SME Competitiveness: The Power of Networking and Subcontracting*, Washington D.C., January 1997, No. IFM-105.

²⁰ Berry, Albert, *ibid.*

²¹ Berry, Albert, *ibid.*

Finally, Berry relates trust and social cohesion to the extent to which SMEs view themselves as having mutual interests and shared goals. They are especially essential for inter-firm cooperation among SMEs. Clusters are liable to be ingrained within a cooperation-fostering culture, based in varying degrees on ethnic groups, religious affinity, family, political parties, or other social groupings. This cohesiveness produces lower transaction costs through the high level of trust among the members of the group. Berry adds that social cohesion becomes important in inter-firm cooperation when gains are associated with firms enabled to lower their guard against transfer of knowledge or workers.

3. *Industrial districts*

The term ‘industrial district’ (ID) was first used in the 1890s, by the classical economic theorist Alfred Marshall, who explained the concentration of economic activity in terms of the emergence of external economies. Today, the concept has been developed further, and is often applied to the Italian clusters, as well as to clusters in other industrialized countries. Bergman and Feser (1999) define the industrial district as a geographical concentration of companies with shared values and knowledge, all of them oriented directly or indirectly towards the same end market. The relations linking these companies one to another are a complex mix of competition and cooperation. The existence of trust and cooperation among these companies, as well as their close social and community relations, enable them to improve their competitiveness.²²

In contrast to clusters, as defined above, the ID encompasses the cultural environment, which entails shared cultural codes and facilitates the building of trust. In this respect, the ID is not merely an economic phenomenon: it is also a social and cultural one. It has developed not just specialization and division of labour between firms, but also implicit and explicit forms of collaboration among local economic agents within the districts (banks, trade unions, local government and local trade associations). This implies a strong feeling of citizenship and active local participation, both at a political level and within non-political associations. The Italian ID can be regarded as a particularly institutionalized, and structurally and socially integrated form of cluster. However, the degree of consolidation can vary from district to district, so a specific cluster may embody fewer ID characteristics than the stereotypical Italian example.

C. MAKING INTER-FIRM RELATIONSHIPS A DEVELOPMENTAL PHENOMENON

The process of clustering is a slow one, and successful programmes of initiatives in support of frameworks of inter-firm collaborations are those that lead to the formation of sustainable clusters and have a positive impact on the business community. As such, cluster development programmes should be holistic and aim at making inter-firm relationships a developmental phenomenon.

Among the international success stories exemplifying this process are the experiences of UNIDO in Africa, India, and Latin America. UNIDO findings have shown that there is no reason to assume that some regions are endowed with a pre-existing set of socio-political conditions conducive to cooperative forms of manufacturing, while others are not.²³ Despite difficult weather conditions, Holland became the flower trading centre of the world, and despite year-round snow in some areas, Switzerland enjoys some of the best roads in the world.²⁴

1. *Clusters and networks: means to enhance SMEs competitiveness*

The phenomenon of SME clusters was first identified in Italy in the late 1970s, and among the first to identify it were Bagnasco (1977), Giacomo Becattini (1979), Sebastiano Brusco (1982), Silvio Goglio (1982)

²² Bergman and Feser, *Industrial and Regional Clusters: Concepts and Comparative Applications*, Regional Research Institute, West Virginia University, 1999. Available at: <http://www.rri.wvu.edu/WebBook/Bergman-Feser/contents.htm>.

²³ Tewari, Meenu, *Supporting Small and Medium Enterprise Production Networks: Some Methodological Themes, Issues, and Questions*, UNIDO, December 1997.

²⁴ Mansur, Yusuf, “Productivity and Competitiveness Development”, in *Review of Industry in ESCWA Member Countries*, Bulletin No.1, 1998, ESCWA, March 1999.

and Giorgio Fua (1983).²⁵ They looked at the now famous “Third Italy” phenomenon, which attracted a good deal of interest among business scientists, and led to a great deal of research into similar modes of organization in other industrialized countries. The idea of a so-called “Third Italy”, comprising the north-eastern and central parts of Italy, arose out of dissatisfaction with an oversimplified picture of a country divided into a rich north-west and a poor south. It is agreed among researchers that the important role played by SMEs in the Italian economy is largely the result of the organization of the economy into clusters. Italy represents one of the most successful examples of clustering, and remains the main reference point in academic and policy debate on SME clusters. Successful examples of industrial districts of SMEs in developed countries such as Italy, Germany, or Spain have inspired research on clusters in developing countries. Such research has revealed similar examples in developing countries, suggesting that the phenomenon occurs in many different countries and sectors.^{26,27}

Clusters and networks emerge either spontaneously, as is frequently the case in developed countries, notably in Italy, or as a result of interventionist initiatives and government linkage-inducing support policies, as in Denmark, or many developing countries and regions, such as Chile.²⁸ In neither case will market forces alone produce a near-optimal level of inter-firm cooperation, given that socially desirable cooperation is normally predicated upon either low transaction costs, or a high level of trust or both.²⁹ However, effective interventionist policy will be based on rules of best practices, and these are for the most part complementary to market forces.

Several experiences in different parts of the world attest to the ability of enterprises to improve their competitive advantage by addressing disadvantages related to their isolation, size, and weak capital base.³⁰ Forms of collaborative inter-firm relationships, whether networks or clusters, may be horizontal, with other SME competitors, or vertical, with other SMEs along the value chain. These arrangements help firms to harness their potential collective competitive advantage. These institutional frameworks improve the competitiveness of the enterprise. Through horizontal cooperation, that is, cooperation among SMEs along the value chain, enterprises can together achieve economies of scale and scope in marketing far beyond their reach as small individual enterprises. They can also attain internalization of functions including market intelligence and training, bulk-purchase inputs, optimal utilization of machinery, and bring together their production capacities to meet large-scale orders. In addition, they can collectively acquire specializations that are complementary within the group, achieving effective division of labour, benefiting from accelerated learning through the emergence of a collective learning space (“invisible college”) and becoming ‘habitually’ innovative.³¹ Through vertical cooperation, with other SMEs, as well as with large firms, enterprises can concentrate on their main business, allowing for and giving way to an external division of labour.

In both horizontal and vertical inter-firm cooperation, collaborative relations increase access of the enterprise to strategic information, and accelerate the learning process through the collective learning space, whereby ideas are exchanged and developed and knowledge shared in a collective attempt to improve product quality and occupy more profitable segments of the market.³² Inter-firm cooperation advances collective flexibility and responsiveness to market challenges.³³ Collaborative strategies likewise enhance the

²⁵ Rabellotti, Roberta, “Is There an ‘Industrial District Model?’ Footwear Districts in Italy and Mexico Compared”, *World Development*, vol. 23, no. 1, Great Britain, 1995.

²⁶ Stocchiero, Andrea, “Euro-Med Cooperation on SME Clustering: Who, Where and What”, Third Mediterranean Social and Political Research Meeting, Workshop X, Industrial Districts and Local Clusters: An Alternative Pattern of Development and Economic Integration in the Mediterranean, Florence, 20-24 March 2002.

²⁷ Humphrey, John and Schmitz, Hubert, op. cit. UNIDO, October 1995.

²⁸ Humphrey, John and Schmitz, Hubert, op. cit.

²⁹ Berry, Albert, op. cit.

³⁰ Ceglie, Giovanna and Dini, Marco, op. cit.

³¹ Ceglie, Giovanna and Dini, Marco, op. cit.

³² Nadvi, Khalid, op. cit.

³³ UNIDO, unpublished information.

flexibility and institutional reflexes of the enterprise, entrepreneurial skills, innovation, productivity, design, quality, and optimal use of endogenous resources, releasing the collective potential of independent small firms.³⁴

An interesting phenomenon is trade, which has been increasing over the past decade, between clusters/networks across borders and between regions, signaling the emergence of a prospective new pattern of future international trade.³⁵ This can be seen most clearly in developed economies, particularly in Western Europe.

Cooke³⁶ describes the evolution of a related phenomenon, mainly in developed economies, namely the 'borderless world', a consequence of the formation of free trade areas and globalization. So-called 'region states' are becoming the natural economic zones, assuming increased economic powers. This is the outcome of the continued decline of the sovereign economic powers of states, particularly those that are members of free trade areas. As the region becomes a stronger economic entity, regional economic authorities grow stronger, despite globalization of factors of production and the growth of global networks of firms. Indeed, the historic nation-state is seen to represent "...no genuine community of economic interests, define no meaningful flows of economic activity and neglect true linkages and synergies among economic actors".³⁷ The region, as the optimal level of governmental, industrial, and technological support, becomes the spatial expression of the cluster.

2. Clustering as a developmental process

Although it is widely known that SMEs could gain substantially from inter-firm cooperation, it would appear that such knowledge alone will not lead to the development of clusters and networks, particularly in developing countries. This is partly due to market imperfections, the high transaction cost of developing the collective effort, a high risk of free riding, lack of inter-personal trust, and other factors. However, these problems can be addressed through programmes of initiatives to develop clusters and networks. In these initiatives, external interventions by independent agents help a group of SMEs to overcome these problems and assist them in developing collaborative manufacturing.

Most of the European success stories are characterized by government interventions and support at an advanced stage of industrial development. In Denmark, however, public policy and support played an important role from the outset in promoting collaboration among SMEs and the formation of clusters and networks.³⁸ Some developing countries have instituted a swift series of successful interventions to promote inter-firm cooperation and collective efficiency. They are an objective lesson for other developing countries considering fostering the growth of potential clusters.

For countries of the ESCWA region, the development of local SME clusters needs to be one of the main ambitions driving industrial policy. The emergence of these clusters could mark the emergence of a manufacturing sector with competitive muscle, a useful contribution to the growth of domestic markets, and increased integration within the regional and international markets. ESCWA member countries can benefit from experience gained elsewhere in initiatives to develop clusters, including increasing examples of success. Firms operating in isolation are frequently hamstrung by the availability of skilled staff, low product quality, poor pricing, high freight costs for raw materials and accessories, poor accessibility to new export markets, and a lack of local or export marketing strategy. Clustering and networking initiatives help these firms to boost their competitiveness by tackling these obstacles collectively. In a cluster, firms are better able to grow rapidly, develop product niches, access export markets and offer new employment opportunities. The objective of a clustering programme could therefore aim at empowering groups of firms to overcome the above constraints more rapidly and with less effort.

³⁴ Pyke, Frank, op. cit.

³⁵ Nadvi, Khalid, op. cit.

³⁶ Cooke, Philip, "Reinventing the Region: Firms, clusters and networks in economic development", chapter 15 of *The Global Economy in Transition*, Eds. Daniels, P.W., and Lever, W.F., Longman, 1996.

³⁷ Cooke, Philip, *ibid.*

³⁸ Humphrey, John and Schmitz, Hubert, op. cit.

It can be assumed that enterprises would be directed to take this 'high road to competitiveness' only if basic supporting conditions prevail: above all an efficient government, and the availability of support structures, such as intermediary organizations, the training of workers and entrepreneurs, credit facilities and other services.³⁹

3. The process of cluster development

Different kinds of clusters could be developed and promoted (namely, artisanal, rural, urban, technology-intensive, micro-clusters). As such, different types of SME clusters would require different support policy orientations. This would depend on the intensity of technology of firms in the cluster, the frequency of change in the cluster, and the level of coordination among the firms.⁴⁰ In the long run, the principal focus of a support programme must be the development of business relationships, especially as information technology now allows for increasingly sophisticated virtual networks. The ultimate rationale for developing a cluster or a network is the economic benefit of cooperation, with dividends for the individual enterprise and the cluster/network as a whole.

Although cluster development initiatives vary widely, commonalities do exist, and there are various common features that could profitably be studied. However, the methodologies of cluster development are normally customized, as flexibility and innovation are required. This is because different environments require different approaches which can be adapted to local needs. There cannot therefore be a unique model, a single recipe, applicable to any cluster development anywhere in the world. Furthermore, customized methodologies help build national capacities.

It follows that a cluster development initiative would set its parameters according to the specificities of its location. The scope of the initiative would be defined: the limits of the initiative, if any; how far the functions of a cluster initiative might extend; how specific it could be; how diverse and comprehensive; or how limited and specific to a certain environment.

The sustainability of the cluster development programme will depend on whether there is a market for the cluster/network development. Cluster development is in fact demand driven, and the process is flexible. Sustainability also depends on building institutional alliances at different levels of the programme, and the ability to draw upon government services when necessary. If clusters are to respond to the global market, a crucial supporting role will be played by local institutions, such as trade unions, business associations, associations of producers, sub-sectoral associations, chambers of commerce, BDS providers, and other institutions and implementing agencies. The government must be a friend of the programme, in such a way that the cluster is able to influence the policy and regulatory environment. In this respect, there must be broad awareness of the function of clusters, and debate on relevant policy, involving representatives of the private sector institutions, government ministries and sectors, BDS providers, and others. Such an approach could be put into effect through the establishment of advisory committees for the projects, to include local core partners plus counterparts, with the scope of participation varying at each phase of the programme as needs arise.

The sustainability of the programme will depend on the ability to build local capacities to develop programmes, namely, to take on the job of a cluster development agent (CDA). Capacity building, as a necessary part of the cluster development programme, must include training of programmes of trainers for BDS providers, to upgrade the quality of their services, CDAs, and technical training on industrial quality, production management, marketing and financial skills.

Social capital (trust) is an important component of the formation of clusters and networks as a developmental phenomenon. These forms of collaborative system embody relationships of trust which encompass not only internal relationships, but external relationships as well. Therefore, according to Nadvi,

³⁹ Mansur, Yusuf, op. cit.

⁴⁰ UNCTAD, op. cit.

“problematizing” social capital is important in the process of cluster development.⁴¹ During this process, social capital should eventually evolve out of cluster/network formation and growth. To achieve that, the initiative must be able to identify and address the factors that help or hinder the shaping of the rules of behaviour conducive to cooperation and fairness. These rules are shaped by locally embedded production, the evident division of labour, the need for integration, and the sharing of a common set of values and thinking processes.⁴²

⁴¹ Nadvi, Khalid, *op. cit.*

⁴² Stocchiero, Andrea, *op. cit.*

III. INTERNATIONAL EXPERIENCE OF CLUSTERS AND NETWORKS

This chapter examines the clusters in Italy and the networking programme supported by the Danish government. It lays out some general policy recommendations based on the Italian and Danish experiences.

A. THE ITALIAN EXPERIENCE: THE ROLE OF CLUSTERS

1. *Background*

The Italian experience is frequently mentioned in the literature on clusters and networks. Indeed, it was in Italy that the phenomenon of SME clusters was first identified in the late 1970s. The so-called “Third Italy” still represents one of the best-known and most successful examples of clustering, and remains the main reference point for academic and policy debate on SME clusters. It attracted considerable attention on the part of business scientists, and led to much research into similar forms of organization in other industrialized countries.

The important role of SMEs in the Italian economy is largely a result of the economy’s organization into clusters. The term usually employed in the literature on the Italian clusters is “Industrial Districts” (IDs). Numerous studies have been undertaken, not only to explain the appearance and development of the Italian clusters, but also to clarify how the lessons of the Italian experience might be applied elsewhere. This chapter will focus on one area of policy intervention in the development of SME clusters: the provision of real services.

2. *The role of SMEs in the Italian economy*

The Italian economy is remarkable for its large concentration of small firms: almost 90 per cent of firms have fewer than 20 employees. The average Italian industrial firm consists of seven employees. At the same time, Italy has a large economy characterized by relatively high labour costs and high GDP per capita.⁴³

The products of the Italian SMEs are high quality goods oriented towards the international market, and include fashion, furniture and home decoration. Italian SMEs are also strong exporters of agro-industrial and food products, as well as various capital goods. The Italian SME dominates the export sector, accounting for approximately 80 per cent of export sales and for more than 50 per cent of holdings in foreign companies. SMEs have the advantages of flexibility and responsiveness, but are often unable to produce larger quantities, or make the investment necessary to penetrate new markets. SMEs in Italy have achieved a high degree of competitiveness owing to their organization as clusters.

3. *Third Italy and the Italian clusters*

There is no consensus on the total number of clusters in Italy. The numbers cited vary according to definitions and analytical methods. The most extensive list available, issued by Italy’s Central Institute of Statistics (later renamed the National Institute of Statistics [ISTAT]) reports the presence in 1995 of 199 clusters, accounting for 42.5 per cent of all manufacturing employment. A more modest estimate is contained in Law No. 317 of 1991, which identifies 115 clusters (Bianchi, Miller and Bertini, 1997).

The clusters are mainly located in the so-called “Third Italy” (north-eastern and central parts of Italy). Economic growth in the “Third Italy” was reflected in rising employment rates, rising consumption, and a reversal of migration trends. The Italian SME clusters became successful producing mainly so-called traditional products, such as shoes, leather handbags, knitwear, furniture, tiles, musical instruments and processed food, as well as the industries that supplied machinery to these sectors.

⁴³ Bianchi, Miller and Bertini (1997): “*The Italian SME Experience and Possible Lessons for Emerging Countries*” (executive summary) UNIDO and NOMISMA.

The “Third Italy” is not a homogenous entity: in many respects, the clusters located in the north-eastern regions differ markedly from the clusters in the central regions. Camagni and Capello (1997) find clear differences in terms of industrial structure, innovation and productivity.⁴⁴ The case studies below outline various aspects of the Italian experience.

Leather cluster: Santa Croce sull’Arno

Located in Tuscany, Santa Croce is a small town specialized in the production of medium to high quality leather for fashion shoes and bags. Clustered in an area of 10 square kilometres are 300 artisan firms employing 4,500 workers and 200 subcontractors employing 1,700 workers. In 1986, the turnover of these 500 firms was US\$ 1.5 billion, with most of the sales destined for the Italian market, and only 15 per cent for export, mainly to the European Community.

Over the course of the 1970s and 1980s, the area experienced a growth in the number of small firms. This growth can be explained not only by the strong Tuscan tradition of self-employment and entrepreneurship, but also by more specific financial conditions: the local rural savings banks adopted a risk management strategy which entailed spreading their portfolio of loans widely but thinly to a large number of applicants. Furthermore, the Italian State offered a variety of fiscal and other incentives to firms employing fewer than 15 workers. Over roughly twenty years, Santa Croce developed into a very successful “flexibly specialized” small-firm cluster. Being specialized in a very volatile business, the fashion industry, requires a great degree of flexibility, which Santa Croce has been able to develop and consolidate. On the demand side, the firms keep costs down by employing different strategies of cooperation: joint purchase of raw materials and pooling of resources to employ consultants.

The production cycle in leather tanning comprises 15-20 phases, of which at least half are subcontracted to task-specialized firms. The intense specialization of the cluster and the vertical disintegration of production have caused every part of the production chain to be represented in Santa Croce, from manufacturers of leather processing machinery at one end, to international shipping agents at the other end. Besides the vertically disintegrated production process, the cluster owes its success to the fortuitous rise in demand for fashion wear in the early 1970s, as well as an institutionalization of sectoral interests, namely in trade associations and savings banks. This collectivization of governance was particularly important in the early 1990s, as the cluster faced new pressures of declining domestic demand, increasing international competition, the increasing costs of skins and hides and tighter environmental restrictions. In the 1990s, the cluster seemed to be responding to these pressures by restructuring production, rendering it less locally confined and less vertically disintegrated. Tanners started importing semi-finished leather from outside the area, thereby threatening to replace more than half of the production cycle in the area. Furthermore, a handful of the oldest and most powerful companies began outsourcing part of their production to leather producing countries. This narrowing of tasks performed in the cluster runs the risk of undermining the institutional synergy and richness, which have thus far secured its success.^{a/}

^{a/} Amin, Ash (1994): “The Potential for Turning Informal Economies Into Marshallian Industrial Districts”, in “*Technological Dynamism in Industrial Districts: an Alternative Approach to Industrialization in Developing Countries?*” UNCTAD paper and synthesis of a symposium on industrial districts and technology, 16-17 November 1992, Geneva.

The case studies cited showcase production organized along the lines of flexible specialization encompassing fairly traditional and craft-based industry, and a certain degree of institutionalization. Although the Italian clusters differ in many aspects, the Italian experience delivers many examples of relatively marginal and underdeveloped regions evolving into growth regions.

4. Characteristics and development of the Italian cluster

(a) Flexible specialization

The goods usually produced in the Italian cluster are customized, differentiated and styled, and the form of production, which enables the enterprises to maintain competitiveness through quality, speed of innovation and response, has been labelled “flexible specialization”. This term sums up two important characteristics.

⁴⁴ Camagni and Capello (1997): “*Innovation and Performance of SMEs in Italy: the Relevance of Spatial Aspects*” Working Paper no. 60, University of Cambridge.

First, production in the cluster is characterised by vertical disintegration, meaning that the production process is divided into tasks, which are then performed by different enterprises. In other words, there exists a division of labour within the cluster, whereby the individual enterprise is specialized in one particular part of the production process. This allows the enterprise to exploit different economies of scale and to focus on its core competencies and maintain product quality. At the level of the cluster, the specialization of the enterprise ensures a high level of specialization of the local workforce, which makes the cluster an attractive place to locate an enterprise.

Second, flexibility applies to the production process: different contractors can group together according to the products required. Enterprises located in the cluster take advantage of the geographical proximity of suppliers of services, of raw materials, equipment and components. This makes the exchanges of production input fast and flexible. Furthermore, flexibility is a key characteristic of the labour input: in Italy, the enterprises located in the clusters are often managed by the owner family—often the production plant is located close to the family's residence, and the labour force is willing and able to adjust working hours according to demand. Informal arrangements, both at the social and the institutional level are highly characteristic of the Italian cluster, and perfectly exemplify the interwoven nature of the economic and social spheres.

(b) *Knowledge and innovation*

Manuelli (2002) focuses on the element of innovation in the Italian experience. The patterns of innovation encountered in the different clusters will depend on product- and sector-specific conditions, and how tightly consolidated the cluster has become. Certain distinctive aspects of the Italian pattern of innovation can none the less be discerned. The main point is that innovation, which is usually something that occurs within the individual enterprise, becomes a collective process in the Italian cluster. This is a consequence of the flow of knowledge and the interdependent nature of the relations in the cluster. The sharing of a local specialized workforce ensures that the enterprises automatically share a certain amount of knowledge.

The innovation process in the Italian cluster takes place through a continuous process of small incremental steps, with leaders and followers. Generally, the knowledge produced within cluster-based firms spreads rapidly within the cluster itself, but very slowly outside it, ensuring a competitive advantage for the cluster as a whole. The form of knowledge in the Italian clusters has also received much attention: the social dimension of the Italian clusters facilitates the utilisation, production and diffusion of so-called “tacit” rather than “codified” knowledge.⁴⁵ One of the major challenges for policy intervention is how to complement the traditional advantages of the clusters with more systematic and codified knowledge sources in order to facilitate further development.⁴⁶

(c) *Competition, cooperation and institutionalization*

Humphrey and Schmitz (1995) describe the relations between the enterprises located in the Italian cluster as “interdependency without dependency”.⁴⁷ To put it slightly differently, the competitive environment is a mix of competition and cooperation. The enterprises, which produce the same products, compete fiercely, but the competition is regulated by certain implicit rules of conduct. At the same time, the enterprises in the cluster cooperate on common projects such as the provision of infrastructure and real services. This is closely correlated with another aspect of the Italian clusters: the institutional framework consisting of public institutions, local and regional government, trade unions, private sector associations and educational institutions. These well developed structures help to facilitate cooperation both between firms, and between enterprises and institutions.

⁴⁵ Codified knowledge is formulated and can be obtained through R&D, while tacit knowledge has a more “intuitive” nature, is not written down or formulated, and is obtained through learning by doing and learning by imitating.

⁴⁶ Manuelli, Andrea (2002). “*Enhancing Productivity and Competitiveness of SMEs through Clustering and Networking: the Experience of Italy*” Paper prepared for ESCWA Expert Group Meeting on Enhancing Competitiveness through the Promotion of Innovative Approaches in SMEs, Manama, 10-12 June 2002.

⁴⁷ Humphrey, John and Schmitz, Hubert, op. cit.

(d) *Diversity and dynamism*

It is important to note that what is described above is an idealized Italian cluster, rather than a specific example. The literature on the Italian experience has stressed the importance of SMEs, especially the importance of small craft firms.⁴⁸ But many Italian clusters also include relations with larger enterprises. Relationships within the clusters vary widely, from egalitarian/pluralistic at one end of the spectrum, to vertical/hierarchical (domination by a few larger firms) at the other extreme.

The Italian clusters are not static entities. As will be considered below, the “Third Italy” has over the past decade experienced intensified pressure from international competition, which has caused a certain amount of restructuring in many of the clusters. This has led to further deviation from the standard model of an Italian cluster or Industrial District. Some clusters now contain fewer enterprises, following industrial concentration through mergers and acquisitions, allowing them to stabilize subcontracting relationships, diversify and innovate, and open up their relationships at the international level. At the same time, other clusters are emerging, some starting from traditional activities, others through the creation of subcontracting networks by Northern firms (Bianchi, Miller and Bertini, 1997).

5. *Cluster supporting policies*

What kind of lessons can be learnt from the Italian clusters? It is not easy in the Italian case to derive a causal link between public policy and the successful development of a cluster. First, although several laws have been formulated in the context of policies to support the growth of SMEs in general, and lately also the development of SME clusters, many of these policies have only been partially implemented.⁴⁹ Second, and perhaps more important, the Italian clusters have emerged to a large extent by themselves, without any substantial assistance from policy initiatives. They seem to have undergone an initial stage of spontaneous growth, followed by a stage during which growth was enhanced by supporting institutions. Although it may appear tempting for policy makers elsewhere to copy the policies employed in Italy, there is often a far greater need for policies to support the emergence of clusters in areas where as yet only the potential exists.

6. *The provision of real services*

An area often targeted for policy initiatives is the supply of real services related to administrative, technological and commercial support. The private sector is usually reluctant to invest in the supply of real services. The provision of real services is an area well suited to public policy initiatives, often in the form of public/private sector initiatives. Service centres offer a wide array of services, including credit guarantee, export insurance, the promotion of exports, including the organization of fairs, access to information on the evolution of markets and technology, client rating, consultancy, training, waste management, pollution control, quality certification, award of trademarks, product promotion, support to innovation, bulk purchase of inputs and product testing.⁵⁰ The service centres are owned by associations of producers, local government, SME support agencies or partnerships involving a combination of the above.

A successful service centre displays the following four features:

(a) Clear guidelines and objectives: this means setting an agenda within the cluster, formulating development objectives that are attainable and which are likely to improve profitability of the different participants in the cluster;

(b) Services customized to the needs of the beneficiaries: this requires an in-depth knowledge of the market and of the production processes, and identification of the needs of the entrepreneurs;

⁴⁸ See for instance Amin (op. cit. 1994, and 1999).

⁴⁹ See Bianchi, Miller and Bertini (op. cit. 1997) for an overview of the Italian SME and cluster supporting laws.

⁵⁰ Clara, Michele. “Real Service Centres in Italian Industrial Districts – Lessons Learned from a Comparative Analysis” UNIDO, case study for project US/GLO/95/144 of the UNIDO/Italy Programme for SME Development.

(c) Embedded autonomy: meaning that the centre must be able to balance its own visions of long-term goals, with the demands of the local entrepreneurs;

(d) Enhancement of the governance capacity of the cluster, by strengthening its capacity to act as a coherent entity with respect to the challenges faced by the entrepreneurs.

Emilia Romagna has been unique in terms of the variety, density and efficiency of public sector support provided to SMEs. Examples of this are CITER and ERVET (a regional development board). Having considered the Emilia Romagna experience, Amin (1999) wonders whether the current way of providing real services is the right approach for the future, in view of the challenges posed by rapid technological change, fierce competition on the international markets and a growing need for product innovation.⁵¹ In this context, innovation and adaptation become even more crucial to the maintenance of competitiveness. Can the institutions supporting the model of flexible specialization adapt to changing circumstances? Amin states that policy initiatives must change focus, shifting away from merely ensuring the provision of real services and towards “providing genuine regional intelligence and strategic guidance”. In other words, Amin sees a growing need for policy makers to look ahead, to support experimental, cross-sectoral ventures, including building links between research centres and businesses, formation of venture capital, young entrepreneurship projects, information technology networking projects.

Box 1. Carpi's real service centre: CITER

The knitwear cluster of Carpi is home to one of the most successful Italian real service suppliers: CITER, established in 1980 as the real service centre for the textile industry of the Emilia-Romagna region. It provides local producers with relevant information on the industry: it edits a half-yearly report on international market trends in the knitwear industry, and on the activities of competitors at home and abroad, including information on yarn prices and qualities, on technological developments in knitwear machinery, and on fashion trends and consumer tastes and values. In the late 1980s, these services greatly assisted local knitwear producers to diversify, with a new emphasis on the prêt-à-porter market (ready-to-wear fashion).

In the beginning, CITER depended exclusively on public funding, but ten years later, the share of public funding had fallen to 30 per cent, the rest being paid by member companies, who either subscribed to the centre's services, or paid for services on an ad hoc basis. The centre is jointly owned by the regional development board, the local producers' associations and nearly 500 SMEs. In the early 1990s, the prêt-à-porter market experienced a serious crisis, which also hit Carpi, resulting in the loss of a quarter of the firms which had been operating in 1988. In addition, many of the firms still in business decided to reduce their spending on real services, causing CITER to lose many of its clients. As a result, the centre was forced to restructure its staff and focus its services on paying clients, deviating from its initial open-to-all policy.^{a/}

^{a/} Humphrey, John and Schmitz, Hubert, op. cit.

Box 2. ERVET in Emilia Romagna

Emilia Romagna is an example of a well-institutionalized region, with a strong local political culture that has encouraged active local participation and promoted a sense of citizenship. ERVET (Regional Agency for the Valorisation of the Territory) was created to facilitate access for the enterprises and clusters in the region to the existing real service supply. ERVET provides information on patents, foreign markets, and establishes cooperation with the regional government.^{a/} Perhaps as a result of well functioning institutions, which are able to mediate between local and regional needs, the Emilia Romagna region has an exceptional track record in promoting zoning laws and planning policies that have created an abundance of low-cost workshops suited to decentralized production.^{b/}

^{a/} Manuelli, Andrea, op. cit.

^{b/} Lazerson, M. (1995), “A New Phoenix?: Modern Putting-out in the Modena Knitwear Industry”. *Administrative Science Quarterly*, vol. 40; pp. 34-59.

⁵¹ Amin, Ash (1999). “The Emilian Model: Institutional Challenges” *European Planning Studies*, Abingdon, Carfax Publishing Company.

7. Conclusion

The Italian cluster is distinctive in that it is not just an economic phenomenon, but also exhibits a very strong social and cultural dimension. This influences the high degree of local participation and institutionalization, the transfer of knowledge, and the innovation patterns in the clusters. Furthermore, the Third Italy is characterized by clusters that have developed spontaneously and without policy intervention. This has led to much debate on whether general policy recommendations can be derived from the Italian experience. The provision of real services is an area of policy intervention which has attracted attention as a way in which policy makers elsewhere could perhaps create similar growth trajectories, without ignoring the differences in historical and other local particularities.

The case studies have served to illustrate the craft-based nature of production in certain parts of Third Italy, and demonstrate other characteristics of the “typical” Italian cluster, as well as showing that the cluster is not a static and fixed system, but can be forced to change and restructure under pressure. The case studies also illustrated how real services can support the development and growth of a cluster.

B. THE DANISH NETWORKING PROGRAMME

1. Overview

The main Danish experience is the “Networking Programme”, a government funded plan to promote export oriented cooperation among Danish small and medium-sized enterprises. It was initiated in 1989 and ran for three years. It was then evaluated by an independent consultant agency.

This section begins with a brief overview of the background and rationale of the Programme, followed by a description of the five month preparation period which preceded the Programme. Then follows an outline of the Programme itself. Examples of the network experiences are given in two case studies. Then certain aspects of the Programme are examined more closely: the role of the broker, the requirement of legally binding cooperation, the phasing and timeframe of the Programme, and the communication of network experiences within the Programme. A few final notes, on ways to consider the effect of the Networking Programme, are followed by a brief conclusion.

2. Programme's background and goals

The reason for the introduction of the Programme was a weak Danish economy, and low demand on the Danish home market in the late 1980s. The Networking Programme was introduced with the objective of strengthening cooperation between SMEs, and overcoming structural barriers within SMEs. The networks were to be long-term and contractually binding, with a minimum of three enterprises working together on two or more strategically important common functions—namely, marketing, the use of advanced technology, administration, R&D (research and development) or the setting of joint quality standards. The networks would enable the enterprises to undertake export promotion activities that they would be unable to undertake on their own, and to promote restructuring to enhance efficiency and productivity. The target group was SMEs in manufacturing industry.

The Programme was led by a board consisting of representatives of trade organizations, enterprise managers, and representatives from the Ministry of Business and Industry, and was allocated 160 million Danish Kroner (roughly US\$ 23 million, approximately).

3. The Networking Programme

(a) Preparing the Programme

First, a five month preparatory period was scheduled, during which sectoral analyses were to be undertaken, so as to identify areas of the industry where networking would have the best chance of succeeding. Second, five pilot networks were to be chosen and monitored, in the hope that they would serve as success stories to be emulated. Third, an information strategy was to be initiated. The information campaign was to draw the attention of SMES to the existence of the Programme, and to inform them about

diverse experiences of networking. Lastly, brokers were to be trained to foster cooperation between enterprises, matching compatible enterprises and counselling them through the whole networking phase.

Of the five planned pilot networks, four were initially chosen, only two of which became functional. Unfortunately, they did not ultimately become the success stories originally envisaged. They did however provide a rich source of experiences, positive and negative, and these experiences were communicated to the other networks via the Programme newsletter and at two network conferences held in the spring of 1990.

During the five month preparation period, forty brokers with extensive experience of enterprise counselling were put through a training course specially designed for the Programme. The purpose of the training course was to give them special insight into networking, covering topics such as the organizational modelling of networks, the legal, fiscal and financial aspects of networks, and strategies for cooperation on production, product development, and marketing. However, the training course was widely criticized for being too costly, not sufficiently focused on the Danish business environment, and much too “basic” for people already equipped with considerable experience in enterprise counselling.

(b) *The Programme design and funding criteria*

The Programme was divided into three phases, during which the enterprises could develop their cooperation. Funding to the enterprises mainly covered the networks’ expenditure on counselling, external consultants and experts. This funding was phased as follows:

Phase I: During this phase, the enterprises could explore the feasibility of establishing a network. The allocation could be up to the equivalent of US\$ 11,000 to cover the cost of assessment of the potential for cooperation.

Phase II was the planning phase, during which the enterprises could apply for financial support for planning the general framework of cooperation, working out a plan of action, a budget, and so on. The allocation could be up to 50 per cent of the expenses of enterprises.

Phase III denoted the establishment of the network and network activities. On the basis of its plan of action and budget, the network could apply for start-up support for the various activities (up to 50 per cent of the enterprises’ expenses in the first year and up to 30 per cent in the second year). An important requirement in this phase was that the enterprises were to make the cooperation legally binding, either by forming a company or by signing a contractual agreement.

The networks only had about two years in which to complete all three phases. During its implementation, the Programme received a total of 690 applications, of which 527 were granted initial funding. But of these only 307 then went on to become network projects, and received funding accordingly. In other words, most applications were granted funding for the first phase, but only a minority went on to receive funding for both subsequent phases. Of the 307 network projects that received funding, 147 functioning networks had been established by the end of the Programme, consisting of a total of 672 small and medium-sized enterprises.

Networks that were granted funding had various purposes including forming an interest group; negotiating a tripartite agreement between buyer, supplier and service supplier concerning sales to export markets; packaging of clothing and other textile products (involving commercial printing); the development of an international network for a harbour; know-how and education; and exports of electronic desks. That list, which illustrates the breadth of the Programme, is further amplified by the following case studies.

4. *Case studies*

Two case studies, taken from the evaluation report⁵² provide examples of different areas of cooperation, network activities and problems encountered. They also exemplify rather different levels of success in networking.

⁵² Amphion (1996). “*Evaluering af Netværksprogrammet 1989-1992*”, Amphion, published for Erhvervsfremme Styrelsen (the Danish National Agency for Enterprise and Housing), Copenhagen.

(a) *Case study 1: A success story from the metal industry*

This network consisted of five enterprises, all of them subcontractors to the metal industry, and producing complementary products. A year and a half before the Programme, the enterprises came together with the idea of joint marketing and production for Sweden. Originating from the same geographical area, the firms were already known to one another, and understood that by jointly offering package solutions they could win larger orders. The network employed a part-time export- and enterprise consultant to coordinate the work, look into funding possibilities and arrange activities for the enterprises. When the Networking Programme was introduced, enterprises applied for and received financial support to formalize the network through agreeing on: product responsibility, and terms of payment; expanded marketing efforts in Germany and the Netherlands; education and training of employees; and quality control, in order to secure ISO 9000 certification.

The enterprises received broker counselling for a short while, but the broker was soon hired by one of the participating enterprises. As the enterprises were working in an industry that required close contact between contractors and the enterprises, and a high degree of flexibility on the part of the enterprises, the network did not formalize cooperation by creating a network company. Instead, it decided to sign a contract, legally binding for two years. The agreement specifies the relations between the enterprises, rights and obligations, the objective of the cooperation, sharing of costs and earnings, and so on. When deciding on that agreement, the enterprises also agreed on activities in subsequent years. The agreement therefore contained the network's plan of action. Since the end of the Programme in 1992, this contract has been renewed every year.

The results of the network have been very positive. The close cooperation in production and sales has made the network able to receive larger and additional orders—including some from international companies like Volvo, previously considered too large a customer. Joint purchase has furthermore lowered the costs of enterprises, e.g. for insurance, transport, and services. In several of these enterprises, the number of employees has risen, and three years after the Networking Programme, four more enterprises have joined the network. Lastly, all of the enterprises stress the positive and inspiring effect of meeting and sharing experiences, thereby overcoming their isolation.

This network distinguishes itself from most of the others in that not only did the enterprises know each other before embarking on the Networking Programme, but also, perhaps more importantly, the idea of forming a network was their own. The lessons learned from this experience can be summarized as follows:

(a) When the enterprises know each other beforehand, and all share a positive attitude towards networking, the building of trust is easier;

(b) The requirement of phase III, legal commitment to cooperation, is not necessarily best fulfilled by forming a company, as was the most common solution. Cooperation can be formalized in more appropriate ways, which suit the participating enterprises better, accommodating the changing needs of the enterprises and the network;

(c) The question of giving up independence is central to the SMEs, and this should be taken into consideration when designing the form of cooperation;

(d) Subcontractors can only gain orders from certain contractors once they have reached a certain size, and this can be achieved through networking;

(e) There is considerable growth potential for enterprises, which participate in networks, as well as the possible advantage of lower costs;

(f) The sharing of experiences and mutual inspiration are among the possible positive side effects of networking.

(b) *Case study 2: Building and construction enterprises*

In this case, the idea of networking came from a broker working for the Networking Programme, and the enterprises agreed on cooperating because they were in some difficulty at the time.

This network consists of various enterprises from the building and construction industry, each covering a different part of the construction process. A broker contacted them in the autumn of 1989 to propose that they form a network within the framework of the Networking Programme. At the time, the construction industry in Denmark was suffering from very low demand, and many enterprises had to lay off staff. The enterprises, most of which already knew each other, decided to concentrate on the newly “opened” market of eastern Germany, specifically with hotel renovation in mind. After having performed a preliminary analysis of the possibilities (phase I), and set up a plan of cooperation (phase II), seven of the enterprises entered phase III, formed a company and hired a project leader and a secretary. Each enterprise covered one of the following areas: bricklaying, painting, woodwork, water and sanitation, civil engineering, electricity instalment and furniture. The network company then set up offices in Denmark and Germany, where a salesman was hired to find contracts for the network.

The first year, the network gained two large orders and was able to perform as planned. However, the following year, despite submitting bids for many projects, the network received no orders. The painting enterprise and the bricklaying enterprise then decided to quit the network. Among the reasons cited by the bricklayer was the perception that the Danish market was slowly picking up again. Furthermore, a change in the tax regime had made it less profitable to have employees working abroad. Finally, the bricklayer felt that some of the enterprises in the network were profiting at the expense of the others by overcharging. This could be explained by the fact that some of the enterprises had hired other subcontractors to perform their tasks, thereby adding one more link, which had to be paid for before the profit “reached” the network. The painter said that he was losing money on the network. His enterprise was participating on equal terms with the other enterprises, although it was much smaller. Its revenues were similarly smaller, so any profits were swallowed by network costs.

The remaining five enterprises fired the salesman and other personnel, and it was decided not to spend any more on bidding for projects, unless there was a fair chance of obtaining the order, that is, notification from the building contractor. Paintwork and bricklaying was then carried out by German or Danish enterprises hired by the network. The network also agreed on adjusting the sharing of costs and profits so that this became more flexible.

At the time of the evaluation, three years after the Programme, the network was operating, but without any significant surplus. The network did succeed in receiving several large orders from abroad, and some of the enterprises had secured other orders as a consequence of the knowledge gained through participation in the network: they were now familiar with important commercial and technical aspects of work in Germany. Some of the enterprises were able to avoid laying off employees despite a standstill in the construction industry in Denmark. However, some of the enterprises had incurred financial losses, and the relationship between the enterprises is still characterized by a certain degree of mistrust.

This approach to networking is illustrated by the bricklayer when he gave his reason for leaving the network: when demand in Denmark gradually began to recover, he was no longer forced to rely on the network. The lessons drawn from this case can be summarized as follows:

- (a) For cooperation to proceed smoothly, the participating enterprises does not necessarily need to share the same line of business. Differences of tradition, attitude and ability do exist, however, and these must be accommodated explicitly;
- (b) It is important not to underestimate the importance of establishing trust among the enterprises, and to recognize that this is a process that takes time;
- (c) The establishment of a network company does not in itself solve the disagreements that can arise over the sharing of expenses and profit;

(d) The smaller the enterprise, the less time it can afford to wait for the network to become profitable.

TABLE 1. SUMMARY OF THE EFFECTS OF NETWORKING EXPERIENCED IN THE TWO CASE STUDIES

	Case study 1	Case study 2
Improvement of competitive ability	Yes	Very different from enterprise to enterprise, but altogether the network has had a good turnover.
Enhanced ability to penetrate markets	Yes	In some cases.
Economies of scale	Yes – mostly in terms of reduced costs. The network has also been able to gain larger orders.	The network has been able to gain larger orders.
Other advantages	Rise in number of employees. More enterprises joining the network.	Some have gained other orders through new contacts.
Negative effects	None.	Large financial losses for some participants. Some mistrust among the enterprises.
Utilization of broker	Very briefly – then he went on to work for one of the enterprises in the network.	Initiator. Handled external relations.
The building of trust	Very successful.	Only partially successful.
The public funding	Helped develop the network.	Could have been better adjusted to the network's particular needs of the network (namely the problem of collateral).
Remarks on the networking experience	Very satisfied with the Programme, and with networking.	Comments varying from "very dissatisfied" to "satisfied".

5. Aspects of the Networking Programme

(a) The role of the broker

The broker's role was to motivate cooperation between the enterprises, to identify needs which could be met by cooperation, and to establish contact between potential network members. The brokers were very active at the beginning of the networking phase, matching enterprises according to production, size, location, resources and attitude towards networking. In some cases, the networking was initiated by the broker alone, but in most cases, some of the enterprises knew each other beforehand, and the broker's role was to find the remaining participants. After this phase, the brokers were mainly used for administrative work: arranging meetings as well as contacts with specialists, consultants and experts, preparing the network's progress reports and applications, and handling general communication between the network and the Programme administration. The brokers thus assisted the enterprises by keeping the network's activities within the Programme framework. For the most part, the enterprises themselves took charge of the setting and formulation of goals, as well as the more precise formulation of conditions for cooperation. The role of the broker was thus reduced over time, and when the network was up and running independently, the broker left the network.

Forty brokers working for the Programme underwent a special training course during the initial five-month planning phase. The critique presented by the brokers participating in the training course (see above) was soon borne out by the observation that other brokers, who had not been through the training course, delivered results similar to those achieved by the trained brokers. Thus, the available data suggest that the (extremely expensive) training course did not have any positive impact on the brokers' performance.

(b) *The legal commitment*

The requirement of a legally binding agreement in phase III was interpreted by most networks to mean the establishment of a company, to be put in charge of the network's activities. For the Programme's board, this requirement expressed a desire for better control over expenditure. From the enterprises' point of view, this configuration had its advantages, because the network's customers would be dealing with a single responsible party,⁵³ and because the rules regarding responsibility and financial matters were thereby made explicit.

However, many enterprises reported problems arising after the second phase, when the cooperation was to be formalized. First, the establishment of a company is costly, and not necessarily the best form of cooperation for all networks (see case study 1). Second, and perhaps more important, it means giving up independence, and making a financial commitment to an idea, which might still need more thought. The demand came too soon for some enterprises, before a sufficient level of trust had been established within the network.

Another disadvantage of forming a network company was the ease with which enterprises could now externalize the network's activities, namely, separate them from their own core activities. It became all too easy to ignore the Networking Programme's intention to bring about structural changes within the enterprises and cooperation on strategically important areas. In many cases, the network was something that took place at some remove from the enterprises, without influencing enterprise structure and activities. Although the establishment of a network company facilitated this "externalization", it was also bound to the motivation of enterprises when they joined the Networking Programme. Many enterprises saw networking primarily as a way of receiving funding, merely through ostensible participation in the Programme, perhaps as a stopgap measure to keep their head above water in difficult circumstances, rather than as a permanent arrangement, as case study 2 illustrates.

(c) *The phasing and timeframe of the Programme*

The reason for splitting up the Programme into three phases was to facilitate monitoring of the network. A progress report was to be handed in after every phase, as well as certified accounts of how the funding had been spent, and a draft plan of what the enterprises envisaged doing during the following phase. In this way, the phasing could help the enterprises to clarify the framework for future cooperation. In some cases, however, the phasing was perceived to be a sort of control mechanism, and the enterprises would avoid reporting any negative experiences to the Programme, in order to ensure the receipt of funding for the next phase. Therefore, certain negative experiences, which could have proven instructive for other networks, were not reported.

The objectives of the Networking Programme were to establish long-term cooperation between the enterprises, and to induce structural changes within the enterprises, as well as the building of trust. The timing of the Programme's phases was fixed: the enterprises had two and a half years to complete all three phases. This had certain consequences. First, the activities chosen for cooperation would very likely be easy to initiate, not those activities on which the survival of the enterprises depended. Second, it greatly influenced the kind of networks that were established: networks consisting mostly of enterprises already known to one another. If an enterprise was obliged to build sufficient trust rapidly from the ground up, it could well perceive itself to be trapped by the requirement to establish a legal unit in phase III. A more flexible phasing, whereby enterprises could move on when ready, or upon fulfillment of certain criteria, might have helped the networks to develop more organically, at their own pace.

(d) *Follow-up and learning from experiences*

As mentioned above, the activities funded by the Networking programme were very diverse; there was a certain element of experimentation with different areas of cooperation. For this approach to be fruitful, the networks must be closely monitored, with successes and failures carefully logged. At the beginning, the

⁵³ As in case study 2, where the formation of a joint network company was necessitated by the requirement in German law that a single party remain responsible for the operations performed under the contract.

Programme administrators paid unannounced visits to some of the networks in order to gain an impression of how the network was developing. It was decided later by the board that it was the task of brokers to monitor the networks, not the job of the administrative personnel. The final evaluation criticized this decision, on the grounds that monitoring of the networks was desirable in order to gather both positive and negative experiences.

The information disseminated from the Programme consisted mainly of newsletters, which some enterprises considered to be a form of advertising for the Programme, rather than valuable information. The enterprises interviewed on the information strategy of the Programme stated that the information disseminated would have had to cover both successes and problems if it were to acquire a reputation for seriousness and reliability.

(e) *The impact of the networking Programme*

It is difficult to evaluate the impact of the Networking Programme, as there were no concrete targets set at the outset (namely, a certain increase in profits or in number of employees). Data on the performance of the enterprises were not collected before, during or after the implementation. Most of the networks receiving funds from the Programme did not exist three years later, at the time of the evaluation. One of the reasons is to be found in the motivation behind many of the enterprises when they entered the Programme. From interviews, it is clear that the main goal of enterprises was to make profit in the short term. When the network did not prove to be profitable in the short term, many enterprises quit. When questioned, many enterprises mention the strengthening of the company's position on foreign markets as a reason for participating in networks. For some enterprises, the programme was a way to get financial aid at a time of crisis, and thus adjusted their goals according to the requirements of the programme. Few of the enterprises mentioned the development of products or joint production as a goal. It is clear, therefore, that there was a certain discrepancy between the purposes of the participants in the Programme (the "demand side") and the purposes of the Programme's architects (the "supply side").

TABLE 2. A REVIEW OF THE DIFFERENT ASPECTS OF THE NETWORKING PROGRAMME

	Strengths	Weaknesses
Funding praxis	Broad: more than 2000 Danish SMEs were exposed to the concept of networking.	<ul style="list-style-type: none"> - Breadth was given priority over efficiency: funding many network projects instead of focusing on the projects most likely to succeed; - Experimental, without following up and learning from the "experiments"; - Did not always correspond to the officially formulated criteria.
Funding through phases (3 phases, each requiring an application)	<ul style="list-style-type: none"> - The funding decreased over the course of the three phases, encouraging the enterprises to gradually "take over" and commit themselves to the network; - Provided an opportunity for the enterprises to evaluate their cooperation and consider its future direction. 	<ul style="list-style-type: none"> - First phase required no payment from the enterprises, and was by some considered a gift to the consultancy business (many networks only received funding for phase I); - Created insecurity among the enterprises about the future funding of the network project.
Timing of the Programme	Deadlines can motivate and ensure that work is being done to develop cooperation.	Too tight for many enterprises. It takes time to develop the network project idea and establish trust.
Requirement of legal commitment in the form of a network company	<ul style="list-style-type: none"> - Facilitated control over how funding was spent; - Facilitated the resolution of conflict over responsibility and financial matters; - Made it easier for the customers to relate to the network when there was only one company. 	<ul style="list-style-type: none"> - Not always the best way for formalizing the network cooperation: lacks flexibility, reduces direct contact with the customers; - Made it easy for the networking enterprises to "externalise" network activities, thereby avoiding restructuring at enterprise level.

TABLE 2 (*continued*)

	Strengths	Weaknesses
Pilot networks	- Did manage to gain experience, both negative and positive, which could be passed on.	- Were never able to serve as success stories; - Were initiated late, so that they developed at roughly the same time as the other network projects.
Role of the broker	Performed the administrative tasks, handled relations with the Programme, and gave the networks advice on practical aspects of networking (fiscal, legal, etc.), which was what most networks needed.	- Some networks needed more counselling on the “softer” aspects of networking: the building of trust, the resolution of conflict between the enterprises, and so on; - In some cases the networks needed more specialized, sector-specific knowledge in order to achieve the goal of cooperation.
Broker’s training course	- Created “networks” among the brokers themselves—they got to know other brokers with whom to exchange experiences; - Gave the brokers knowledge about the Networking Programme.	- Did not make any difference in performance (trained brokers vis-à-vis untrained brokers); - Was very expensive and insufficiently adjusted to the needs and competencies of the participants, or to the Danish business environment.
Communication of experiences	Newsletters were distributed with information about networking experiences.	The newsletters were considered overly optimistic, with insufficient information about the problems of networking.

However, many of the enterprises had positive comments to make on their participation in the Programme. When questioned by the evaluation team, more than half of the enterprises stated that networking had had a very positive effect on their relations with the other enterprises in the network, and on their attitude towards participating in future networks.

6. *Conclusions from the Danish Networking Programme*

The case studies show quite clearly that success or failure of the networks depends to a very large extent on the motives of the participating enterprises: it is much easier to develop a network when the motivation is already there and the enterprises have a clear idea of what they want from cooperation, as well as how much they are willing to give. The Danish Networking Programme is an example of a publicly funded, top-down approach to network building, and as such it has its weaknesses, as has been demonstrated throughout the chapter.

Preparation is an important part of the process. If pilot networks are to serve as success stories for others to follow, it is important that they are given the time to develop, and that they are monitored so that experience can be gained. Furthermore, the preparation should include the acquisition of knowledge of the conditions under which the funding programme will be conducted, characteristics of the target group, criteria to be adopted and policies to be formulated. SMEs in different sectors have specific characteristics, which need to be taken into account when trying to establish cooperation.

The question of measuring impact is a difficult one, and no universal approach exists. But if any impact is to be measured, it is important to define goals and gather data. For example, the Programme showed a tendency to experiment with different areas of cooperation, with the aim of learning about network building under different circumstances. To this end, there should have been an explicit focus on monitoring the networks and scrutinizing their results. If a principal goal is restructuring at enterprise level, measures should be undertaken to ensure that the network activities do not become completely divorced from the enterprises’ own core activities, making it a matter of designing the Programme to fit the circumstances.

A more implicit goal was to create a positive attitude towards cooperation among the small and medium-sized enterprises, and here the Programme chalked up a modest success. As mentioned above, more than half of the representatives of participating enterprises stated, when interviewed three years later, that

networking had had a very positive effect on their relations with the other enterprises in the network, and on their attitude towards participating in networks and similar forms of cooperation in the future. Furthermore, roughly half of them stated that they cooperated more with other enterprises three years after the Programme than they had done previously.

The experience of the Danish Networking Programme shows that short phases, early commitment to a legal agreement (in most cases the establishment of a company) and a tight timeframe are not ideal circumstances for achieving the goals of developing long-term cooperation or effecting structural change.

IV. INTERNATIONAL TRENDS IN TEXTILES AND CLOTHING: CHALLENGES FOR THE ESCWA REGION⁵⁴

A. BACKGROUND

Textile and clothing production is one of the most globalised industrial activities. For developing countries, which enjoy a competitive advantage in the export market, the industry can be an engine of growth and employment. International experience has shown that this industry can be well suited to various collaborative inter-firm management systems, such as clusters, networks, or other self-help groups, within regions and across borders.

There are only a few suppliers of textiles and clothing already sufficiently efficient to benefit from the eventual liberalization of international trade in the products in ESCWA member countries. Unless the other suppliers (namely, the vast majority) adapt to these developments, they will find that they cannot compete. The industry needs help if it is to cope with global changes. In this context, ESCWA/UNIDO launched a joint project in 2003 for the development of clusters and networks in the region.

B. NEW DYNAMICS OF COMPETITIVENESS

The textiles and clothing industry has been witnessing important changes in the international market, resulting in increased competition from low cost suppliers, especially in South and Southeast Asia. Low production costs, primarily the cost of labour, are the touchstone of success in the industry, particularly in clothes manufacturing. Developed countries have continued to respond to changes in the market by attempting to turn threats into new opportunities. This took the form of continued restructuring of the industry, functionally and geographically, such that increasing sophistication offsets reduced competitiveness on price. Firms are introducing changes in production structure, taking advantage of various factors including the rapid spread of computer-aided design, and cutting systems; the use of electronic point-of-sale systems; and just-in-time delivery to minimize inventory on the retail side. In marketing, various innovative approaches serve to challenge competition on price. These include forming new alliances, branding, high fashion, customization of production, and targeting the sophisticated upper echelons of the market. Restructuring also involves relocating the industry to developing countries through joint ventures, subcontracting, or others. Changing world trading patterns and preferences can have serious impacts on those countries that fail to adapt rapidly or take advantage of emerging market opportunities.

1. *Trends in international trade*

World trade in textiles and clothing has been expanding over the past decade, reaching more than US\$ 340 billion in value in 2001. In relative terms, this represented a marginal decline in its significance in world merchandise trade (from 6.3 per cent in 1990 to around 5.8 per cent in 2001). Within the industry itself, certain shifts have been observed globally in recent times. During the period 1990-2001, trade in textiles increased at an overall annual average rate of 3 per cent whereas trade in clothing increased by 6 per cent. This has increased the proportion of clothing exports from 51 per cent of total exports within the industry in 1990 to 57 per cent in 2001.

Developed countries are the largest market for garments and other apparel products, with the European Union and the United States absorbing three-quarters of the global output. Furthermore, there are indications of increasing demand in developed countries for clothing made in developing countries. Developed countries produce significantly less clothing than textiles, and centres of apparel production are shifting, with a tendency to favour countries with lower productions costs and/or a strategic geographic location. In addition,

⁵⁴ For more details, see the following ESCWA documents: *Report, Expert Group Meeting on Enhancing the Competitiveness of Exports of Textiles and Clothing in Countries of the ESCWA Region in the Light of Globalization and the WTO Agreement* (Beirut, 3-5 November 1999; ESCWA, *Challenges and Opportunities Associated with the New International Trade Agreements (Uruguay Round) for ESCWA Member Countries in Selected Sectors: The Textiles and Clothing Industry*, ESCWA, 1998 (E/ESCWA/ID/1997/7); and Roger S. Rice, *METAP MedPolicies Initiative XB Project – Trade and Environment Issues affecting the Textile/Garment Sector*, ESCWA, Lebanon, May 2003.

developed countries are sourcing an increasing percentage of their textiles from developing countries each year.

Mediterranean and Asian countries have historically had the advantage of low wage rates and indigenous production of some of the raw materials. However, this competitive advantage has proven vulnerable to two basic developments: one is the emerging regional trade bloc, which allows for preferential trade treatment, and the other is competition from countries located on the borders of major markets. Apparel is a rapidly changing business with very short product life cycles, consumer preference depending not only on the season but also on numerous other factors. A rapid response to these changing demands is central to the successful export of garments. Countries like Mexico, Turkey and Ukraine have the advantage of minimal lead times and are expected to continue to offer tough competition to other exporters in the Mediterranean and Asia. Export data from the EU shows that there has been a shift in the strength of supplier nations, with the transitional economies of Central Europe and Baltic States playing a stronger role.

2. New market dynamics

In textiles and clothing, the main factors influencing competitiveness in developed countries are changes in technology associated with smaller production runs, flexibility, improved quality, improved workstations, and information technology. They are also associated with non-technology factors relating mainly to demand-driven market forces (the consumer becoming master of the market) and also changes in market structure and market relations, the emergence of new business strategies and tools, and new scope for fashion and design. Many of these developments are to the benefit of smaller-scale producers.

Future market trends in textiles and clothing in the developed countries are evolving around: (a) the increased range of products and continued fragmentation of the market; (b) the continued emphasis on value and growth of the retailer's own labels; (c) the emphasis on environmentally friendly production; (d) the continued trend towards outsourcing with the developed countries retaining control over design and distribution; (e) the widespread use of sophisticated knowledge-based systems, instead of experience-based systems; (f) the mass customization instead of mass production; (g) the long-term planning supplanted by quick response management.

(a) Fashion trends and design

From the designer's point of view, if exporters are to access developed markets today, such as the European market, they must: (a) study the market; (b) understand fashion from a sociological perspective; and (c) appreciate that Europe has a solid culture of visual communication. The European buying public is known to consist of highly sophisticated and experienced consumers of high quality goods, able to discern subtleties of fabric and workmanship. Exporters must pay attention to material, finish, cut (including both exterior and interior of the garment), packaging and delivery. The European buyer is also highly conscious of time, in terms of punctuality, rapidity and adherence to project deadlines; highly conscious of agreements, requiring close adherence to them down to the last button or stitch; and highly conscious of legislation.

(b) Competitiveness in the 2000s

Changes in the dynamics of competitiveness in the international market are forcing manufacturers to improve their performance in terms of quality and standards, manufacturing systems, workplace environment, time standards, quick response management, marketing tools and improved distribution.

Quality and standards are an important challenge for exporters. Quality is a concept which covers raw material and labour, the type of processing required and the systems, methods and practices required to ensure a consistent standard of product quality. Quality starts with yarn and thread processing, the production of fabric and the printing, dyeing and finishing. Many problems encountered in developing countries are created by the enterprises themselves, in that few enterprises measure or test the quality of the fabric.

Manufacturing systems and methodologies are also important challenges facing exporters. Team working systems need to be designed using integrated sewing units based on the just-in-time principle (rather than the system of de-skilling all manufacturing operations so that little or no training is needed). This

requires considerable capital (which many SMEs lack) and a multi-skilled team to perform all operations in the sewing process. Manufacturing layout varies from enterprise to enterprise, determined by space and shape of building, with due consideration to space between machines, space at the work place, lighting, and so forth. Another challenge is the type of materials handling systems employed to reduce 'handling' within a workplace designed to ensure a consistent standard of product and good workflows.

Improving the workplace of the small enterprise is a trend promoted by the International Labour Organization (ILO) to help increase productivity, with the creation of an improved environment approached not as a cost but rather as an investment. An improved workplace means improved quality, quantity and timely production, better human and industrial relations, and workplace flexibility. A better workplace also helps increase productivity by enhancing the employer's self-esteem, the worker's involvement and commitment, and enterprise competitiveness and image. This long-term approach is a voluntary process that has been promoted in Asia, Latin America, and Africa since the 1980s. Its principles are focused on achievements, linking working conditions to other goals, built on local practice, learning by doing, encouraging exchange of experience, and promoting the involvement of workers. This approach is described as meeting both economic and social goals. It is simple and uses low cost techniques, adapts to local conditions, and results in sustainable actions.

International time standards are based on average time needed to produce one unit of apparel. With suitable adjustments, they can be used to assess the average performance of a company. Time standards vary by country and location, depending on the type and quantity of product, machines, layout, material handling, and labour skills. The complexity of the product and the quality of raw materials play a major role.

Quick response management is another challenge facing developing countries in the textiles and clothing industry. 'Quick response' and just-in-time techniques are ways created by companies in developed countries to supply their customers more quickly, to reduce stock levels in the light of diminishing orders for bulk production, and to respond rapidly to market changes. This requires setting up the organization and management structure to respond to customer needs. This can be seen in the planning of smaller orders by product style (model), colour and size ratios, improved modes of transport and quicker delivery schedules. It also requires, among other things, defining purchasing quantities, lead time, formal quality control procedures and systems, establishing new production engineering methods, and redefining worker skills, leading to a multi-skilled workforce, team working, and group incentive schemes. It also requires reorganization of management, methods and techniques, as management is sometimes linked to culture, especially the challenge of developing organizations and cultural needs when entering new markets and servicing those markets on a just-in-time basis. Change is necessary for future growth. But the changes needed to create effective quick response management cannot be achieved overnight; they have to be implemented on a phased basis to ensure the efficiency of each.

In marketing, the challenge is to identify more efficient ways of packaging and delivering goods to the customer against set manufacturing and delivery dates. Marketing departments have to be organized so that market information on fashion trends and quantities are obtained on a regular basis. Furthermore, manufacturers have to form closer relationships with their fabric suppliers for this just-in-time principle to work. With innovations such as home shopping, manufacturers must be able to supply out-of-stock products at short notice. The fundamental question is: what market should exporters in the region supply?

The Internet is creating new opportunities for the business, particularly small and medium-sized producers of fashion and other garments. It is more useful to SMEs than to big companies, and it is a chance for small countries and businesses to get to the level of larger countries and companies. Business based on the Internet and modern communications is booming and information technology can bring many advantages to the textiles and clothing industry. The Internet is a tool for the exchange of ideas and offers much cheaper advertising than a brochure.

The future growth of the industry in developing countries will require firm strategies for every area of the business. This means that a certain amount of restructuring and business process reengineering is required to suit future growth strategies. Finally, for exporters to be simultaneously competitive in the international market and in their local and regional markets, governments and enterprises must take a holistic view of the effect of policy and strategies on exports, imports and national economic growth.

(c) *Enhancing competitiveness of exports by adopting innovative management tools*

A strategy framework, based on competitive advantage instead of the comparative advantage of the enterprise, is needed to address the competitiveness of exports in textiles and clothing. The strategy would rely on specialization and differentiation in higher value-added products, as opposed to over-reliance on natural resources; a specialized labour force engaged in management, production, marketing and R&D, as opposed to over-reliance on cheap labour to create low cost, low quality products; export-oriented industries with growth potential, as opposed to a local market focus which limits growth; and public-private sector cooperation as opposed to over-reliance on government protection and initiative. The strength of this strategy lies in the creation of wealth through the choices of a nation.

C. THE ESCWA REGION

The majority of the industrialists in textiles and clothing in the ESCWA region as well as concerned government officials are now aware of the risks posed by global changes, but not of the opportunities opened up to the sector. Exporters need to prepare themselves to face the challenges of globalization and enhance the sector's competitiveness. This requires a strategy based on inter-firm collaborative efforts recognized and supported by appropriate government policies. A public-private partnership collaboration is needed here.

Many major exporting countries in the region—namely Egypt, the Syrian Arab Republic, and, to a lesser extent, Lebanon—are dependent on textiles and clothing for their export earnings. However, the ESCWA region still accounts for less than one per cent of world textiles and clothing exports (less than any of the relevant East Asian countries). In absolute terms, this business of US\$ 2 billion was dwarfed by the efforts of China (US\$ 35.7 billion), Hong Kong (US\$ 34 billion), India (US\$ 7.5 billion), or Pakistan (US\$ 5.6 billion).

In contrast, the region is a major importer of textiles and clothing, and thus records a deficit in its balance of trade in this sector, amounting to more than US\$ 4 billion in recent years. Looked at from a different perspective, this deficit marks an area of potential growth for the industry. Indeed, the principles of competitive advantage may easily apply to trade in these products. The extent to which this potential can be realized will partly depend on the ability of suppliers in the region to enhance quality and productivity and improve their capability to compete on the international market. This also depends on the extent of support (or hindrance) provided by government policy.

Textiles and clothing industries have played an important role in some of the economies of the region in the last decade, in terms of output, employment and foreign exchange earnings.⁵⁵ Egypt and the Syrian Arab Republic dominate textiles and clothing exports from the region. Both countries have a long history of production of these products, a solid raw material base, and relatively cheap labour, all of which have allowed them to develop a strong domestic textile and clothing industry. However, they have been unable to secure a competitive position at the global level, as is evidenced by their modest export performance.

Several constraints affect countries in which the public sector dominates the industry, including Egypt or the Syrian Arab Republic, the largest exporters of the products in the region. This is reflected in their inability to realize their full export potential, as attested by the steady decline of exports over the last ten years (though clothing fared significantly better in the Syrian Arab Republic than in Egypt). In both countries, the decline can largely be attributed to poor quality clothing, a relatively narrow selection of products, and internal production problems linked to poor management and control of the public sector. Manufacturing activities in textiles are dominated by the public sector while private sector activities are concentrated on clothing. In the Syrian Arab Republic, there are 24 large government-owned companies operating in the country, ranging from spinning, weaving, knitting, carpets, and hosiery, to ready-made garments. In addition, private factories and small business workshops are widespread all over the country.

⁵⁵ ESCWA, *Challenges and Opportunities Associated with the New International Trade Agreements (Uruguay Round) for ESCWA Member Countries in Selected Sectors: The Textiles and Clothing Industry*, ESCWA, 1998 (E/ESCWA/ID/1997/7).

Private enterprises are currently facing various constraints owing to market over-saturation, with companies finding themselves burdened with huge inventories of un-saleable goods. In Egypt, there was a boom in private manufacturing encouraged by easy credit facilities that eventually led to over-production because of the limited domestic market. Those companies that were producing for export were able to sustain their operations. Other enterprises were able to reverse some of the chronic problems of the industry through garment franchising, stricter quality control and better management, producing higher-grade outputs suitable for exports. In the Syrian Arab Republic, over-production in clothing for the export market and the piling up of huge inventories are due to inappropriate marketing decisions. Presently, this industry is undergoing radical changes as a direct result of the Government's overall economic reforms (which can be compared to Egypt's privatization programmes).

Poor maintenance and a low utilization of installed capacity, excess employment in the public sector and low productivity are among the numerous problems that have affected performance and competitiveness. Both countries export the major portion of their cotton rather than taking advantage of the opportunity to process it and produce higher value-added goods. In both countries, a competitive advantage in a vertically integrated textile and clothing industry has turned into a disadvantage.

In the two countries, the clothing industry relies mainly on local raw materials (cotton) and on an industry that supplies the necessary cotton yarn and fabrics. Both are also endowed with a large pool of cheap labour possessing traditional skills in clothing manufacture. However, the production environment in the country's public textile and clothing industry has turned the country's most valued natural competitive advantage into a manufacturing disadvantage. With poor supervision and mismanagement, the skilled labour force operates at a low level of productivity, cancelling the benefits of its low cost. The supply of insufficient quantities of poor quality inputs at non-competitive prices has been responsible for the losses in public sector clothes manufacturing. Private sector manufacturers have avoided this problem by importing their fabric inputs, thus bypassing the disadvantages associated with local industrial links.

Countries with a relatively open market and an active private sector, such as Jordan and Lebanon, are relatively small exporters of textiles and clothing in the region. While both share similarities, including the lack of a raw material base, there are some interesting differences between them. Lebanon's industry relies almost entirely on clothing while textile exports are virtually non-existent. The Lebanese clothing industry has high labour costs relative to other countries in the region along with minimal tariff protection compared to the relatively high protection enjoyed in Egypt, the Syrian Arab Republic and, to a lesser extent, Jordan. Furthermore, Lebanon's textiles and clothing industry still has a competitive advantage in design and quality.

In Jordan, the textiles and clothing industry is relatively new. The capital-intensive textile industry has been the main focus of industrialists, despite the country's relatively cheap labour. In clothing, noteworthy recent successes include joint ventures pursued with Israeli firms targeting the export market of the United States. In Lebanon, the industry has been experiencing a gradual decline in its contribution to manufacturing exports in the last few years.

In the oil-producing sub-region of the Gulf Cooperation Council (GCC), although several countries became new entrants to the industry, it does not contribute significantly to total non-oil exports, and the local content is still limited. In these operations, Oman, Qatar, and the United Arab Emirates concentrated heavily on clothing, emerging as the largest clothing exporters among those countries. Saudi Arabia and Bahrain concentrated more on textile exports. The development of the industry in this sub-region has been a controversial issue. It is agreed that, initially, the chief attraction was the opportunity for both GCC country producers and producers from East Asian countries to circumvent import quotas imposed on exports from the latter. Some of these companies are relocating with the phasing out of the Multi-Fiber Arrangements (MFA). It is true that the industry is drawing on a huge reservoir of low wage labour from neighbouring Asian countries, and benefiting from the advantages associated with the services and facilities the Governments are providing. However, competitiveness is not based solely on low raw material and labour costs; the situation is now much more complex in a market where fashion and design, for example, or quality, and instant response to market demands, have become decisive factors.

V. DIAGNOSTIC STUDY OF APPAREL MANUFACTURING IN LEBANON

A. INTRODUCTION

1. Objectives

The diagnostic study aims: (a) to identify the main features of apparel manufacturing; (b) to map out existing business practices and inter-firm relationships along the value chain; and (c) to identify the nature and role of market linkages. The main purpose of the study is to gather details on how firms actually function in the groups identified, and examine any potential for the formation of clusters or networks. This knowledge is for dissemination to all the actors involved in the programme, including key producers, other relevant firms, associations, and national agencies with a history of involvement with SMEs.

The study was carried-out in collaboration with EWTOU of the Federation of Lebanese Chambers of Commerce, Industry and Agriculture, and with the valuable support of the Lebanese Syndicates of Textiles and Owners of Apparel Manufacturing Factories.

2. Methodology

The study is based on information collected through in-depth structured interviews with concerned stakeholders, including a selected group of apparel manufacturing SMEs, local organizations, suppliers, service providers, business and producers' associations. This study was based on a selection of apparel manufacturing SMEs and other firms along the value chain. A total of 70 interviews were conducted.

SMEs were selected to ensure that the sample was representative of the sector in terms of: (a) the various functions involved (manufacturing of apparel and related products, specialized production services including subcontracting, business support services, equipment suppliers, major retailers, and so on); (b) the range of manufactured products produced (men's wear, ladies' wear, children's wear, knitwear, sportswear, socks, lingerie, and so on); (c) the size of the enterprises (mainly small and medium-sized firms, plus a few larger ones); (d) the targeted markets (domestic and/or export markets); market intelligence (personal contacts, brochures, newspapers, web sites, industry directory, and so on); and (e) location.

Semi-structured questionnaires, based on UNIDO's preferred practices, were used as guidelines during the meetings. Questions covered the following areas: basic information about the firm; its workforce, training programmes and technical skills; the premises, production facilities, and technology installed; the markets and marketing channels; the raw material and intermediate goods; financial and credit status; the opinion of respondents on quality of infrastructure, government policies and regulations; the firm's participation in business associations; inter-firm collaboration, if any. The interview ends with a look at the firm's problems and strategies.

Face-to-face interviews were conducted with representatives of enterprises and relevant associations and organizations. Target respondents were the owner or managing director whenever possible, or, if unavailable, a head of department capable of answering questions on a particular topic.

In addition to interviews, discussions were held with relevant public and private sector organizations, and an extensive literature search was conducted.

B. MAIN FEATURES OF APPAREL MANUFACTURING IN LEBANON

The Lebanese apparel industry manufactures a wide range of clothing ranging from high fashion and branded garments to basic items as well as a range of clothing accessories. It is a traditional industry that has known and is still experiencing drastic changes. Firms in this sector—despite considerable obstacles—are trying, like their counterparts in other sectors, to adapt to these changes.

1. *A labour-intensive industry*

The size of the apparel manufacturing workforce is not accurately known: there are no reliable statistics. The official figures are an underestimate inasmuch as the industry is partially manned by undocumented expatriate labour. It is known that there are significant numbers of these workers; it is also known that they are ignored by the official statistics.

TABLE 3. NUMBER OF APPAREL MANUFACTURING FIRMS AND THEIR WORKFORCE IN LEBANON

	Number of operating apparel firms	Workforce (Persons)
Ministry of Industry ^{a/}	2 262	10 560
National Employment Office ^{b/}	2 429	20 969

a/ Ministry of Industry, "1998 Industry Survey Results", available at: <http://www.gov.lb/statistics/results.htm>.

b/ National Employment Office, "Employment Market Study", 1997, updated in 2000

These firms are concentrated mainly in the regions of Greater Beirut (including Dora, Bourj Hammoud and southern suburbs), Tripoli and Mount Lebanon.

In Lebanon, the medium-sized and large factories are well established in several areas. The business support services, such as marketing and advertising, are increasingly becoming separated from production sites. Smaller scale firms, especially the dressmaking workshops, are being driven out of business. Most companies are not geared to producing a large number of pieces per style. The industry is still sizeable and important to the Lebanese economy, but currently takes on only a fraction of the workforce it has the capacity to employ.

2. *Family business*

The sector is dominated by family businesses run by an owner-manager. The industry is now characterised by a huge number (not precisely known) of micro businesses which have emerged following the closure in recent years of many larger units. As each relatively large factory closes, a number of smaller businesses are created by ex-employees to meet the market needs that the larger unit was unable to cater for. "Most of these entrepreneurial businesses (workshops) tend to specialize in subcontracting work, mainly in "cutting, making, trimming" (CMT) operations".⁵⁶ The apparel industry is particularly receptive to the creation of such small units due to the relatively low start-up costs incurred in a labour intensive industry traditionally dependent on manufacturing know-how and skills.

The increased proportion of micro-businesses is possibly one of the most positive aspects of the recent structural changes in the sector. Collectively, these businesses could be viewed as a nursery within which several large businesses of the future are free to take their first steps.

Most of the apparel firms surveyed were established within the past 30 years. The industry is largely run by an aging, relatively uneducated yet experienced management. However, control is increasingly being handed on to a second generation of better educated family members.

3. *Continuous technological modernization: the need for fresh investment*

Apparel manufacturing worldwide is experiencing a sea change. What was an activity reliant largely upon traditional know-how and experience is becoming a sophisticated and complex activity in which new techniques and equipment are subject to modern business management tools and processes. These trends have affected local manufacturing enterprises in a variety of ways. It was soon noted that in the industry as a whole the adoption of new technologies has been erratic. This is arguably not too surprising, insofar as the sector is evolving to take care of niche market needs. Some products, such as haute couture garments, for

⁵⁶ Based on an interview with an enterprise manager.

example, or wedding dresses, will benefit less from new technology than from solid traditional skills, especially the basic sewing, assembly and finishing operations which are likely to remain essentially labour intensive activities for the foreseeable future. Higher technology-intensive manufacturing tends to be more at the 'mass' end of the market. Here, a few enterprises have invested in computerized fabric cutting machinery; others have introduced CAD (computer assisted design) equipment or sophisticated embroidery machines.

The apparel manufacturing industry is considered by many to be in a period of transition, and to be in need of fresh investment to ensure continuous technological modernization. In embroidery manufacturing for example, as an enterprise manager indicated: "old equipment results in higher costs and sometimes lower quality, and contributes to the lack of competitiveness that is observed in many firms within this sector. ...Most of the new high-performance machinery and equipment are relatively expensive to invest in, but it is difficult, or perhaps impossible, to meet customer demands without the use of modern machinery, especially for high volume, good quality and quick response production, particularly for the export market".⁵⁷

Many SMEs use high-quality and old machines simultaneously. It is not uncommon for the latest high-quality computer-controlled machines to be in operation at one production site, while elsewhere the same firm relies on older machines and the traditional craft skills of its workforce. One entrepreneur stated that the successful companies of the near future "should have clear policies related to capital investment". Another interviewee, a children's wear manufacturer, described his policy as follows: (a) depreciation of equipment over 10 years, but replacement after 4 years, if appropriate, to maintain the advantages of productivity conferred by the latest equipment; (b) invest to automate and achieve unit cost reduction; (c) invest to stay ahead of the competition.

Many apparel manufacturers reported that they invested in machinery and equipment during the past few years despite flat profits and falling margins. They described this as a response to rapid technical and market change, mainly in the automation of certain processes. Nevertheless, some investment decisions proved to be misguided, resulting in over-capacity, lower productivity than expected, and a reduced market share.

4. Over-capacity

The average apparel manufacturing firm visited was not equipped to handle high volume jobs. As a whole, the production capabilities of the industry are regarded as more suited to short or medium runs. Nonetheless, many manufacturing firms suffer from over-capacity, as a result of easier credit extended by donor agencies through banks. The funds were allocated over the past few years to apparel manufacturers for investment in new equipment and machinery. Sadly, poor demand resulted in intermittent or low-level use of newly purchased equipment.

Over-capacity is especially prevalent in this industry because: (a) modern equipment tend to have a much higher capacity than the machinery they replace; (b) some companies over-invested in new equipment, following ill-considered investment decision-making; (c) seasonal fluctuations in some apparel orders cause manufacturers deliberately to maintain a high capacity without using it for much of the year; and (d) some manufacturers have the tendency to retain old equipment after investment in modern equipment in order to meet possible peaks in demand and/or specialist customer requirements.

One equipment supplier explained that when manufacturers sell off their older equipment, skilled workers are sometimes able to buy it cheaply and then set up their own "black market" operations; hence, introducing an over-capacity in the domestic market.

⁵⁷ Based on an interview with an enterprise manager.

5. Financial problems

For many apparel manufacturers, cash flow is a perennial problem. Most of them operate on 120-day credit terms and rarely revert to legal action for overdue payment (in most cases, customers are in financial difficulties themselves, and the courts cannot force them to pay amounts of money they do not have). They prefer to be flexible and collect when their debtors are able to pay. This “forced cooperative state of affairs” is leading to a higher level of debt among manufacturers. The main problems associated with the financing of apparel manufacturing include: (a) high cost of finance, when available; (b) lack of medium to long term finance at low rates of interest; (c) lack of Government provision of adequate investment or product development incentives such as time-limited tax exemptions.

Debtors were forced to cooperate among themselves, through their Syndicates and with Government support, proposing a programme for a reasonable rescheduling of debt repayment to banks.

6. An aging skilled labour force

(a) Manpower

Manufacturers considered the workforce to have shrunk over the past decade. The workforce is estimated to be approximately 70 per cent female and 30 per cent male. This does not reflect the gender ratio of the labour force in Lebanese manufacturing industry as a whole. Within the apparel industry, females tend to be employed on the shop floor as machinists (sewing, stitching, and so on). They are also more involved nowadays in the design phase. Men, on the other hand, predominate in supervisory and managerial roles, along with some technical positions (including cutting). “Illegal” workers in this industry currently account for a sizeable percentage of the workforce.

Apparel manufacturing is suffering from a declining skilled labour pool that is aging, with the average age of a skilled labourer today between 35 and 50 years old. As interviewees stated, finding qualified employees often becomes a significant business challenge: “We are struggling with a poor image problem among young potential entrants to the labour market... Good professional fashion designers and production managers are currently needed in this industry... Business and technical skills are increasingly important in these highly competitive times”. The design and product development careers required by the industry include: fashion designer; textile designer; pattern cutter/grader; colourist; and illustrator.

(b) Management skills

Apparel manufacturing has always been a very entrepreneurial sector. In general, enterprise managers have a relatively high level of knowledge and experience of manufacturing operations. However, in a number of cases, managers or their management team have a shortage of expertise in some functions such as finance, marketing and business planning. Probably very few apparel manufacturing firms have a computerized Management Information System (MIS) to track jobs and provide decision support information such as job costing, time spent and actions performed.

(c) Training

Most firms do not have any formal training policies, or programmes. In most cases, new employees learn through apprenticeship and can therefore suffer from the inherited faults of the production system. Whilst on-the-job training is essential and invaluable, it has its limitations if not supplemented by other forms of training: at best “the new recruits are asked to mimic their seniors” (according to one of the interviewees) and training lacks contact with innovative ideas and solutions.

The main reasons behind poor training procedures, as observed in most of the manufacturing units, are primarily, the “unaffordable” cost for small companies of training new recruits (in terms of time as well as money) and the equally “unaffordable” cost of releasing operational staff for further training. The sector’s trade associations are discussing several projects with the government related to the establishment of sector oriented educational and training programmes, and modern apprenticeship schemes.

C. MARKET DYNAMICS AND COMPETITIVENESS OF APPAREL MANUFACTURING

1. Profitability

Apparel manufacturing offers the domestic market products that are often fashion-sensitive and subject to intense competition. This leads to continuous downward pressure on prices and knock-on effects. Manufacturers often operate below capacity because of the limited and over-saturated domestic market. Furthermore, they are unable to benefit from new export opportunities in the absence of a cooperative environment which might enable the enterprise to overcome its inability, unaided, to meet the volume of demand in the export market.

Very few of the apparel manufacturing companies surveyed seemed to be flourishing, and many expect even harder times ahead. They face downsizing, mergers and acquisitions, or closure. Throughout our survey we observed an intensive effort by manufacturers to confront these realities by cutting costs, wherever possible, and thereby improving efficiency. The relatively low productivity observed at quite a few of the firms visited is the result of the inefficient use of the production processes. Many companies make inefficient use of capital, retaining a range of specialized equipment that is often unused for extended periods. Other firms suffer from under-utilization of key equipment (short shifts).

2. Cost competitiveness

Apparel manufacturers and exporters unanimously voiced deep concern about the difficulties they are facing in trying to cope with increased local and international competition. They attributed most of these difficulties to domestic impediments, the majority associated with unduly high production costs, high transaction costs, and complicated bureaucratic procedures. They claimed that the problem lies more in negotiating obstacles at home than in coping with changing conditions on the international market. Part of the restructuring process that is underway in apparel manufacturing in Lebanon is indeed a response to the severe domestic difficulties faced by the producers.

By far the most severe problem cited was the high cost of production, attributed to the unduly high cost of utilities. According to a recent study carried out by the Association of Lebanese Industrialists,⁵⁸ Lebanese industry is paying relatively high prices for electricity, averaging 13 cents per kilowatt hour, three times that in other Arab countries, and more than 3 times the international average of 4 cents. This has forced many industrialists to generate their own power at around 10 cents per kw hour merely to benefit from the slight reduction in cost. The industrial sector in Lebanon accounts for roughly 40 per cent of all electricity dues collected. The same applies to industrial fuel and gas oil, with fuel prices roughly five times that of other Arab countries (and the price of gas oil almost triple). Warehouse and land rentals are also substantially higher than other countries in the region. Moreover, telecommunications cost are also relatively high, with the average cost per minute roughly 23 US cents. Internet connection fees in Lebanon stand at US\$ 48, compared to less than US\$ 20 in Egypt, Kuwait, and the United Arab Emirates. The aforementioned study failed to identify any reasonable justification for these high costs.

The same study showed that Lebanon is virtually the most expensive country in the region in terms of logistics, land and maritime transport, with high transport costs aggravating the problem of high production costs. The cost of port clearance and other formalities is very high, in addition to extra costs relating to commissions, tips, and bribery. Throughout the interviews, all firms agreed that the largest component of shipping costs is transport from the factory to the port or airport, and not from the latter to the country of destination. One exporter put the cost of shipping from factory to airport at roughly US\$ 800 for 20 cubic metres, including the fees levied by transit agents and others; whereas transport of the same volume of goods from Portugal to Paris would cost less than half that sum. Firms have to deal with agents and incur heavy costs in order to avoid cumbersome transport and clearance procedures.

⁵⁸ The Association of Lebanese Industrialists, *Cost Factors Affecting Lebanese Industry - Position Paper by the Association of Lebanese Industrialists (ALI)*, not published, August 2003.

Another factor is the high cost of labour. The minimum wage level in the industry is LL 300,000 (US\$ 200) per month. Several exporters put the minimum wage payable in reality at US\$ 400 per month, compared to US\$ 50 in the Syrian Arab Republic. In addition, the employer is obliged to pay a sum equivalent to 38.5 per cent of the wage into the social security fund. Added to that is the serious problem of the Lebanese State National Social Security Fund (NSSF) imposing a heavy indemnity burden, especially for older companies with long-serving employees.⁵⁹ Moreover, some companies find themselves having to provide (voluntary) private medical insurance and transportation allowances to their workers plus school allowances for their children. A closely related major concern is the decline in availability of skilled labour. Many skilled members of the workforce are emigrating in search of job opportunities abroad.

The absence of adequate domestic capital financing is one more problem hindering the modernization of apparel manufacturing. The scarcity and high cost of credit is deterring most industrialists from upgrading their outdated machinery and equipment. Banks are reluctant to lend to the private sector, particularly the industrial sector, seeing better opportunities in financing government debts.

3. 'Limping' sector growth

Apparel manufacturing has experienced a number of forces for change over the past ten years. The most important driving force has been that of local and international price competition. Some manufacturers have easily held their highly coveted position in the design of quality fashion products, in innovation, and in manufacturing capability (short to medium runs). However, the inevitable pressures of low-cost items, produced in nearby countries and in the Far East, have placed severe pressure on the more downmarket segment of domestic manufacturing ("dumping").

In the face of these challenges, the industry has had to endure long periods of restructuring, which in many instances is still ongoing. There is, however, some evidence that this painful transition is beginning to produce some positive results which eventually may result in a revitalized, but very different sector based on high skill levels, niche markets and high margin products that target the upper echelons of the export and domestic market. This evidence is a powerful affirmation of the great potential that could yet be unleashed by Lebanese apparel manufacturing.

4. Pricing

Tough market conditions marked by price pressure are causing margins to decline. Firms may be pricing too low, owing to fear of losing customers (sometimes unwarranted, and therefore a consequence of poor communication), failure to add real value, or inadequate pricing information from the market (including competing apparel manufacturers and suppliers). Price pressures may also emanate from low productivity and ineffective purchases of raw materials and subcontracted work.

5. Demand

The apparel manufacturing industry sets the fashion, influencing people's perceptions of how fashion is best followed. Through its link with dressing codes and trends, it lies at the heart of societies and has a great psychological impact on customers and users, especially when it makes use of high quality designs and innovative fabrics.

Apparel items are increasingly being tailored to the needs of different groups of customers. This leads to shorter production runs and a consequent prerequisite for apparel manufacturers to be more skilful in producing and managing large numbers of relatively small jobs. Apparel demand is also influenced by domestic demographics: the limited size of the market, per capita income, the trend setting lifestyle (especially among the younger segment of end users, who tend to follow fashion), climate variations, and the

⁵⁹ End of service payment is calculated by multiplying final salary by years of service. The problem stems from the drastic decline since the mid-1980s of the exchange rate, which has left a big gap between what the NSSF has collected for the worker and the sum to which he is entitled. The problem is magnified with regard to employees with many years' service in long-established companies. The employer is asked to make up the difference, although he has already paid his regular contributions.

growing suitcase trade sustained by Arab tourists and shoppers. The Lebanese apparel manufacturing industry is also increasingly influenced by demographic trends in export market countries, and some ladies' production is geared to the tastes and styles of women in countries of the GCC.

There is scope for increasing demand for apparel products through the application of innovative approaches. Depending on the specific product lines and the target markets, opportunities for innovation can be identified in the areas of: (a) the use of new materials and accessories; (b) creative and "avant-garde" designs; (c) supply and distribution chains; (d) and production control and automation. None of the interviewees mentioned the possibility of introducing innovative approaches in the management of marketing and human resources.

Firms estimated that they could become competitive through investment and innovation. However, no one mentioned collective cooperative efforts as a means to improve competitiveness.

Many industrialists regularly attend specialized trade shows in Europe, the United States, the Far East and elsewhere, and they try to capture new ideas and implement them in their factories with minimum delay.

Many manufacturers were not fully aware of the potential of e-business or the infrastructure it requires. At the same time, many had set up basic non-interactive web sites on which a short description of their activities is displayed. Apparel manufacturing in Lebanon will probably have to face up to the challenge of e-business in the very near future.

6. Market

Lebanon is a well-known regional centre for the production of haute couture dresses, wedding dresses, and many other high value-added items. This specialty seems to be expanding, particularly in response to shopping visits to Beirut by well-off customers from nearby countries. The international reputation of many Lebanese haute couture designers is reinforcing the trend.

The Lebanese apparel industry has changed significantly in the past twenty years. While the fashion end of the business has always maintained a relatively high profile, the apparel manufacturing industry in general has lost its leading position on domestic and export markets. It is believed that market share has been declining in nearly all garment categories. In recent years the industry has suffered from significant importation of low cost items, creating significant local competition in the lower segment of the market, in addition to overseas competition on price for high value items. The industry has reacted with drives to establish "brands", namely to create markets for selected product; and a continuous move away from small retailers toward larger retailers.

Emulating the relative success of European manufacturers, many Lebanese apparel manufacturers have concentrated on higher margin niche products, such as wedding dresses, uniforms, baby wear, ladies high fashion dresses, casual wear and sportswear for all ages, or lingerie.

The local apparel market seems to be saturated with products and services provided by a large number of manufacturers and traders, and many small companies are competing for the same limited share of this market. Several manufacturers tend to work across a wide spectrum of products, targeting children's, men's and ladies' wear. Currently the local market is not large enough to allow specialization, so they compete by trying to service the entirety of the market.

The success of apparel manufacturing in Lebanon depends on the ability of the industry to offer value-added products and services, different from those available in competing manufacturing centres. Manufacturers rely in most instances on their knowledge and insight into the cultural proclivities of both Arab and European consumers. In order to expand export markets, apparel manufacturers need to ensure that, other factors being equal, potential clients feel more comfortable dealing with Lebanese manufacturers than with their competitors. The overall business environment, including the legal and regulatory framework, therefore has to be right. A "common voice" would assist apparel manufacturing to reach its true potential locally and in the export markets.

Another marketing consideration is the current worldwide drive towards ecologically accepted products. This is becoming an additional and important factor in the marketing of consumer goods, including textiles and apparel. We did not detect that this consideration held any particular interest for apparel manufacturers, even though it points to the existence of a prospective niche market worthy of careful investigation.

7. Trade

At present, manufacturers are experiencing lower levels of exports than in the past. Several reasons were advanced in explanation: the loss of good markets, namely the Libyan Arab Jamahiriya and Iraq, severe competition mounted by the Gulf countries and/or the emergence of local manufacturing facilities in neighboring export markets. It must in any event be noted that official trade figures are not generally believed to reflect the true value of clothing exports, trade volumes being routinely under-reported for tax reasons.

Seeking to expand their export markets, many manufacturers are turning, when possible, to their traditional business partners, including the Arab Gulf states, the Mediterranean countries (Greece, the Syrian Arab Republic, Jordan and Egypt) and the European Union (France, Italy, Belgium, Germany). Others are looking beyond these markets, sending trial consignments to other European countries, the United States and Africa.

Recognizing the export market potential of their products, many apparel firms are developing strong brands that have succeeded in many locations throughout the region. The branding of a product line is by no means an easy strategy to implement, but it can yield highly profitable opportunities.

Under the present circumstances, many manufactures expect market growth to be disappointing, or even negative. It is possible that the only hope of survival for the industry lies in niche markets. There is considerable cut-throat competition between manufacturing enterprises – typically fighting for a limited domestic market share, having too many companies chase the same customer. Several factories are currently moving to subcontract parts of their production processes to less expensive micro-level enterprises. This is widely perceived to be a step in the right direction.

8. Quality assurance

Not many apparel manufacturing firms are considering the implementation of quality assurance policies as part of their management and production processes. For many, quality means the creation of a “good” product, rather than an established system to ensure that all products are manufactured efficiently such that they meet the specification agreed with the customer. Many manufacturers were aware of the existence of quality assurance standards such as ISO 9000. But none had initiated the establishment of such systems. The attempts of several certifying agencies to convince manufacturers to adopt such systems were clearly doomed to failure. On the other hand, Industrial Research Institute officials confirmed that they are currently providing services in response to specific quality control requests made by a few apparel manufacturers. With more aggressive export-driven strategies adopted by the industry, and supported by the Government, there is now a willingness to upgrade and expand such facilities, with tailor-made services suitable to the apparel manufacturing processes.

9. SWOT analysis

The table below presents the strengths, weaknesses, opportunities and threats (SWOT) of the apparel manufacturing sector in Lebanon.

SWOT Analysis of the apparel manufacturing sector

<p>Strengths</p> <ul style="list-style-type: none"> • Customers generally satisfied with product quality and service. • Technical competence: a good record of response to technical changes, and increasing interest in enhancing technical skills. • Increasing levels of investment in machinery and technology. • Entrepreneurial approach makes manufacturers flexible and resilient and promotes strong personal relationships with customers and staff. • Good industrial relations with skilled and disciplined labour force. • Ability to offer garment design; quick response; and short run capacity. • Good image among regional buyers. • Industry had a tradition of exposure to the world of fashion, creativity, innovation and “good taste”. • Culture of business interaction with many trade partners in the region and abroad, with a range of language capabilities, including Arabic, French, English, Armenian and others. 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Lack of performance data, a key driver of improved productivity. • Variable quality of management with poor management skills in a substantial number of companies. • Low margins and lack of resources for training. • Poor export marketing and lack of sufficient presence in better retail channels. • Poor human resource management. • Low levels of training with a poor record on apprenticeships. • Poor image, making it difficult to impress customers, or to achieve high visibility in Government and the media, or to interest investors. • Manufacturers targeting the lower end of the market cannot compete with imports from low cost sources. • High dependence on imported raw material. • Isolated from trade partnerships. • Low productivity of labour. • Inefficient use of machinery. • Financial constraints.
<p>Opportunities</p> <ul style="list-style-type: none"> • Growing apparel markets. The Euro-Mediterranean Trade Agreement with EU and others should offer a positive future in many traditional markets. • Proximity to the European and Arab markets. • New markets, including Western Europe, Eastern Europe, North America, countries of the large Lebanese Diaspora. • Development of industrial clusters with clear strategic objectives. • Potential growth of a few specialized sub-clusters with high fashion inputs, namely ladies’ wear (haute couture, wedding dresses and so on). • Potential and capacity to adopt a collective approach to high volume orders. • Scope for companies to develop sourcing, branding and marketing. • Joint ventures with European apparel. 	<p>Threats</p> <ul style="list-style-type: none"> • Skill shortages. Most people consulted believe that shortages of skills are already handicapping the industry and will become worse in the future. • Lack of policy support. • High input costs. • Financing problems. The industry has a poor image on the capital markets, which hinders its access to capital. • Excessive and inflexible regulation. • Aggressive entry to the local market by regional and Asian (low cost) competitors. • Unstable political situation. • Unstable regional political environment. • Competing countries using advanced manufacturing systems. • Lack of effective government support.

D. INTER-FIRM COOPERATION IN APPAREL MANUFACTURING IN LEBANON

Contrary to the assertion of several stakeholders that inter-firm cooperation runs counter to Lebanon's industrial culture, we were able to find evidence of informal collaborative efforts in the knitwear and garment sector within several small geographical areas, such as the Dora - Bourj Hammoud area, the Beirut Southern Suburb area, and the Jebel Mohsen area in Tripoli. These informal efforts include a number of firms involved in the garment manufacturing business, and in operations such as knitting. A certain concentration of firms is found in these three geographical areas. With further development and institutionalization, they could perhaps become clusters.

On the other hand, the apparel manufacturing firms depend primarily on their own distribution channels, involving their own personal contacts, locally and abroad, for the gathering of market intelligence. It seems that they seldom use the Industry or Trade Associations (such as Chambers of Commerce and Industry, Association of Lebanese Industrialists) or the Government offices (such as the Ministries of Industry, of Economy and Trade, or the commercial attachés at the Lebanese Embassies) as additional sources of market intelligence.

1. *The production chain*

Strategic partners within the production chain consist of firms linked together in different parts of the production process in a particular set of related product lines. This involves, on the one hand, tracing back the links between a firm and its network of suppliers, and on the other hand, tracing forward the firm's links with its buyers, which may be large customers; other small or medium-sized firms; assemblers; exporters; retailers; wholesalers; the public sector; or direct users.

Strategic partners in the apparel industry

1. The industry's companies, ranging from the large and medium-sized companies whose output includes well-known brand names, to the smallest sewing workshops or micro-enterprises.
2. Government departments, including the Ministry of Industry, the Ministry of Economy and Trade, the Ministry of Education and Higher Education, the Ministry of Labour, and the Ministry of Finance.
3. The Business Associations, including the Lebanese Textile Syndicate and the Syndicate of Owners of Apparel Factories, the North of Lebanon Syndicate of Owners of Apparel Factories, the Syndicate of Sock Manufacturers, and the chambers of commerce and industry and the Association of Lebanese Industrialists.
4. The suppliers of textiles, threads, accessories and related haberdashery.
5. The suppliers of machinery, equipment and spare parts.
6. Training organizations and training providers, such as Ecole Supérieure des Arts et Techniques de la Mode (ESMOD), Collège Artistique de la Mode Moderne (CAMM) and Al Taraki Technical School.
7. Educational organizations at the secondary, vocational and technical, and higher education levels.
8. Others, offering technical and business services.

While there was a general recognition that such collaborative occurrences were rare, several interviewees yearned for the opportunity to be actively involved in a formal business network. Interviewees voiced implicit fears that collaborative efforts may eventually lead to one or more firms controlling the other partners instead of collaborating with them. The level of trust and willingness to cooperate in a certain framework is greatly influenced by the make-up of the group of participants. In some situations it appears that trust is more plentiful when members of the group are roughly equal in size and economic power. In that case, fears of domination or manipulation are reduced. These considerations will probably be of greater significance for small groups during the early stages than for larger groups interacting over longer periods of time.

Inter-firm relations cover a broad range of business operations—marketing, technological choice, diversification, skill acquisition and upgrading, finance, and so on. Inter-firm cooperative efforts found within the industry, though minimal and ad hoc, are very important and considered by many manufacturers to be “the very life-blood of business”. The gains from such cooperation tend to be greater, and cooperation easier to achieve, when the cooperating firms sell their products outside the country.

2. Cooperative efforts among manufacturers

Despite fierce local competition, which limits formal cooperation among manufacturers, the following phenomena were observed in several regions of the country: some lending of machinery among manufacturers, joint manufacture of the occasional large order, joint purchase of ancillary items, a few referrals, albeit limited in scope, as well as informal cooperation in the sharing of information. There is little evidence, however, that many garment manufacturers are actively and systematically collaborating with other manufacturers through joint purchases of inputs or the active sharing of resources.

Some garment exporters are entering into technical tie-ups with foreign counterparts to produce for the upper end of the market. These collaborative opportunities provide help with: strategies for increased penetration in export markets, attracting more customers and promoting business; shared knowledge pertaining to customers’ problems; trend analysis; considerations of business location, and negotiation tactics related to commercial agreements and product selection.

(a) Potential “embryonic cluster”

A membership-based, geographically concentrated potential cluster was found in the Jebel Mohsen area in Tripoli. Concentration of firms in this area is much more intense and organized than in the two comparable areas in Beirut (Dora - Bourj Hammoud, and Beirut Southern Suburb). In Tripoli, the firms in the Jebel Mohsen area are members of the Syndicate of Apparel Manufacturers; the members pay dues and are committed to a certain level of joint problem solving. It is not clear, however, if any business success depends significantly on the actions of other members. The types of ad hoc inter-firm cooperation that exist include: organization of production lines; equipment leasing; equipment repair; staff secondment; quality control; transportation for just-in-time delivery; and improvement of technical know-how. Furthermore, members of such a group informally cooperate in many areas, such as the use of specialized machinery, the purchase of inputs, marketing, and, to a lesser extent, joint product design. The cluster is still at a very early stage of maturation, but seems to be heading towards further integration of the capabilities of its members.

The Syndicate, which began in 1998, has a current membership of 52 enterprises, mainly trouser factories, producing jeans and trousers for men and children. Around 20 per cent are exported directly while the rest are for the local market (with 60 per cent subsequently exported by customers). The export markets are mainly Arab Countries. Manufacturers used to export more to Europe, but had to stop four years ago in the face of heavy competition from Chinese products. However, they are still able to compete with Syria in terms of production costs and product quality.

The advantages of members of this group are that they employ their staff on a piece-work basis, and apply quality control. This mode of operation is seen to improve the performance of the labour force. Factories are either operating as CMT (cutting, making, trimming) or full production units. The factories employ on average 15-20 labourers each, with an estimated 2,000 working for the group in total. The average factory can produce 3,000 pieces per week. Customers impose quality control norms and production adheres to these norms. Textiles are either provided by customers or by factory owners themselves. In the latter case, during off-peak periods they produce trousers and supply directly to retail shops. For the export markets, Bureau Veritas comes to inspect goods prior to shipping.

Their industry is classified as type 4, which means it is accepted within residential areas. But they are suffering from a lack of industrial zones in North Lebanon and are interested in establishing production complexes if permits can be obtained. They do not have any marketing capabilities, and there are no

technical schools in the area for the training of workers. They are interested in purchasing new machinery and investing in new production processes.

The Euro-Lebanese Center for Industrial Modernization (ELCIM) undertook diagnostic studies for five factories, and proposed further technical assistance against a standard fee equivalent to 20 per cent of the consultant's costs. The proposal was rejected and contact ceased. It may be necessary to ask ELCIM to renew that connection.

(b) *Subcontracting relations*

Subcontracting of production activities has been widely noted. This includes the production of children's wear, trousers for men and almost all specialized activities such as embroidery, and screen-printing. Other specialized services used by the industry include fabric dyeing, and fabric treatment processes.

It was found that subcontracting relations were not confined to firms located in one of the three geographical areas mentioned above. On the contrary, contractors and subcontractors were in most cases from different areas of Lebanon. This shows that Lebanon may constitute one large geographical area for a potential cluster, which would transcend the limitations inherent in the very small size of the three geographical areas.

Many firms in the apparel industry have benefited greatly from inter-firm production arrangements. The production of ready-made garments, involving a series of specialized processes, each involving specialization, provides a favourable environment for the development of subcontracting relationship among firms.

The industry is developing a tendency to horizontalize and integrate production. Cooperation with specialized subcontractors for specific tasks is becoming more common. Major production operations were entrusted to external parties (children's wear and men's wear manufacturing facilities provided examples of this process). Enterprise owners saw in such arrangements an increase in flexibility and a way to bring down production costs. Hence, most of these larger firms rely on a core group of micro and small manufacturers to fill their production orders, while design, finishing, quality control activities and logistics usually remain in-house. During peak season these firms add other local factories to their subcontracting lists.

The garment manufacturing industry includes many small independent firms set up and run by technically skilled and experienced individuals who were former workers or supervisors of larger firms. The fact that these subcontractors are invariably small businesses may be explained by their low degree of vertical integration: they usually specialize in only one phase of the industrial process and in short series production. They are most active in labour intensive activities (such as sewing), carried out by workers on low wages.

The micro and small subcontracting firms were found to be either dependent upon one single garment manufacturer or undertaking work from several manufacturers. In rare cases they were found to be engaged in selling independently on the local market. Such firms not only gain experience of new designs and work with a variety of quality fabrics, but also have a real possibility of improving their knowledge and skills through their association with larger firms. With time, they will develop the ability to meet the more stringent standards necessary for exported garments, since long-term arrangements between the various parties—namely manufacturers and subcontractors can lead to improvements in production quality. However, although production tie-ups with subcontractors become increasingly knowledge intensive, the motivation of the larger manufacturer remains unchanged: increased flexibility motivated by cost cutting pressures.

Long-term cooperation would be of huge significance for the industry. Currently, there is presently hardly any close cooperation between larger and smaller units beyond simple ad-hoc subcontracting arrangements among a certain proportion of firms. A comparable proportion of firms are engaged in joint

activities, and the distribution of such horizontal links by size and ownership resembles that observed among subcontracting firms.

(c) *Cooperative efforts in marketing and sales*

Marketing and commercialization are, in general, rather weak in the sector—notable exceptions relate to manufacturers promoting a brand or establishing a franchise. There is little evidence of inter-firm cooperation in marketing, an area where such efforts are most needed. The majority of company owners consider that marketing is their direct responsibility and are not willing to share their tricks of the trade with others. According to one, this combination of acumen and self-reliance “kept the business going all these years”.

While some of the larger firms sold under their own brand names locally and, in a few cases, also in certain export markets, most firms dealt with a variety of marketing agents for the local and export markets.

The nature of forward linkages with these different agents varies. Selling agents, for example, do not engage in technical dealings with manufacturers; products are standardized, and there is intense price bargaining. In contrast, the various merchant brokers, operating in the domestic and export markets (as well as working as the agents of foreign buyers) tend to have closer technical liaison with local manufacturers on issues relating to design and product quality, and prefer more regular production and contractual arrangements with their suppliers.

Most firms visited produce for the domestic market, although many did export in the not-so-distant past. In many cases, the manufacturers have little knowledge of the end market of exported goods. This leaves them seriously disadvantaged with respect to design, fashion trends and quality feedback. Exports are, in most instances, channeled through export trading houses with established contacts with foreign buyers. The need to “protect” their business from local competition is cited by many traders and exporters as a valid reason for keeping their customers unknown to manufacturers. Such a system will not permit the existence of customer-supplier networks that involve a supply chain of firms cooperating with each other in meeting the needs of a shared customer. No evidence was found of inter-firm cooperation in sharing market information and information on customers and competitors, locally or in exports markets.

The organization of manufacturers into a cluster and the intervention of business development support services would assist manufacturers in carrying out joint marketing activities. In view of the small quantities of raw materials that are usually needed by a single SME, joint imports of raw materials by a number of firms would help them reduce the cost of materials and shipment. While a single SME would have difficulty meeting large orders in the export market, joint efforts by a group of firms would enhance their export capability and competitiveness.

(d) *Other forms of cooperation*

Further cooperation linkages perceived among manufacturers include the exchange of ideas for investment in neighboring countries; improvement of the image of the Lebanese industry through campaigns; organizing joint participation at trade fairs and industry delegations to potential export markets; influencing the business environment by lobbying with Government; and joint bidding for Government tenders.

3. *Cooperative efforts with suppliers*

Three types of suppliers can be discerned: equipment suppliers, raw materials suppliers, and services suppliers. In Lebanon, the relationship between producer and supplier is a simple traditional one. It is worth considering how this relationship could be expanded and developed.

(a) *Suppliers of machinery and equipment*

Information provided by the machinery suppliers to their customers includes general technical and market developments worldwide, including new niche market trends noticed elsewhere. Specialized trade

fairs and exhibitions supplement manufacturers' knowledge of the latest developments in equipment and machinery. It was found that most apparel manufacturers regularly attend the relevant professional fairs in Europe and the Far East.

Technical support is offered by machine suppliers, including maintenance and training, and several suppliers offer after-sales service. The number of technicians recruited by machine suppliers has been reduced over the past few years due to the low level of economic activity in the sector, a fact that reflects badly on the level and quality of services they currently offer. There are however a few freelance technicians who can to some extent fill the gap by offering operation and maintenance support services to manufacturing companies.

Many manufacturers are attempting to forge more stable arrangements with suppliers. For example, joint collaboration initiatives were identified among a group of jeans manufacturers and an equipment supplier for the development of new designs and the improvement of product quality. Other areas identified include: credit arrangements, referral of customers, modernization of production processes, and technical training of production personnel. With one equipment vendor servicing numerous manufacturers, new manufacturing methods are being disseminated through a group of cooperating firms.

Clustering of the apparel manufacturing sector would enhance the relationship between producers of apparel and suppliers of machinery; this would be reflected in the improvement of product quality, design and technology.

(b) *Raw material suppliers*

Textile suppliers and vendors give manufacturers useful guidance on product selection and fashion trends. They serve as useful resources in the formulation of competitive positioning strategies related to product offerings. The suppliers of raw materials to the apparel industry provide textiles and fabrics, threads, and a range of accessories and other consumables. Fabrics used in the local manufacturing industry are becoming increasingly fashion-sensitive, and tend to follow fashion trends observed in developed countries (textures, designs and colours). They are mainly imported from Europe, Turkey, and the Far East, along with some from regional producers in the Syrian Arab Republic, Egypt and others. Imports are arranged either by the apparel firms themselves or by wholesalers. By contrast, the domestic accessories industry is not well developed, being more readily available in the regional markets, namely the Syrian Arab Republic and Turkey, or the Far East. The industry's need for raw materials could be better identified in an organized cluster, as the enhancement of inter-firm cooperation between producers of apparel and producers/importers of raw materials could help the apparel sector to acquire the material inputs best suited to its needs, improving product quality.

(c) *Service suppliers*

(i) *Cooperative efforts with support manufacturers*

Support manufacturing units, such as embroidery shops and screen printing firms are considered an important extension of production lines. Each manufacturer cooperates, in general, with a limited number of these specialized firms. As price tends to be more or less uniform, the choice of these service providers depends on levels of demand for such services and product quality. In certain cases, a referral system is established by an embroidery firm and a screen-printing enterprise, resulting in good business for both stakeholders. Attempts to improve support services by producers need to be investigated further.

(ii) *Cooperative efforts with magazine publishers*

Two specialized fashion magazines were found in the market. Apart from publishing information about the latest fashion collections produced by the different firms, these publishers offer to produce catalogues for individual manufacturing enterprises. Cooperation with magazine publishers, and, through them, with the range of complementary services that are involved in these businesses (graphic arts,

modelling, printing) is acceptable to many manufacturers who consider the magazine publishers to be their indirect public relations “partners”.

(iii) Cooperative efforts with the training centres

The industry is seeking the cooperation of local universities, technical colleges, and vocational schools. It is inviting them to design relevant curricula and offer training courses which would make apparel manufacturing an attractive career path. A notable example is the projected “Technical School for Fashion” which could be set up in cooperation with the Ministry of Education and Higher Education.

On the other hand, private training centres offer rather limited training at present. The few existing technical schools (such as ESMOD, Ecole Supérieure des Arts et Techniques de la Mode, or CAMM, Collège Artistique de la Mode Moderne) are running good programmes aimed mainly at haute-couture designers and manufacturers. They aim at increasing skills and productivity through the application of artistic and technological techniques. Courses offered include: fashion design, flat pattern cutting, draping, principles of fabrics, apparel assembly, fitting, tailoring, and so on. Other courses include techniques in fashion sketching and pattern making, and production management and merchandise display. The fees are relatively high, forcing graduates to seek the higher wages usually to be found in the growing haute couture segment of the market. As such, these schools are not able to meet the needs of the broader labour market. However, graduates of these technical schools may in the future form a good supply base for an enhanced haute couture segment of the market, improving the quality and image of Lebanese products. Furthermore, the market may eventually witness spill-over of skilled workers from the competitive haute couture sector. Producers may benefit, through clusters, from training services more directly suited to their needs.

4. Role of business associations as facilitators of the clustering and networking process

Business associations such as the syndicates of textiles and garments and chambers of commerce and industry can play a special role in facilitating inter-firm cooperation through clusters or networks. The syndicates can: (a) encourage collaboration and joint initiatives between apparel manufacturing firms; (b) assist members in sharing experience and know-how; (c) set standards of best practice through their code of standards and code of ethics; (d) ensure product quality; (e) identify and enforce measures against illegal competition; (f) ensure the establishment and control of production standards; (g) act as a mediator among members through a system of dispute settlement; (h) initiate and support training programmes. The existing Lebanese syndicate of textiles and garments and the local syndicates of Jebel Mohsen area could play an important role as facilitators of the development and institutionalization of one or more clusters.

A parallel undertaking would be for the syndicates to organize an apparel manufacturing labour market information system which would enable the gathering and provision of information on job types and their availability, predicted needs, and training resources. A dedicated and interactive web site with regular updates would be a natural corollary of the information system.

E. CONCLUSION

The apparel manufacturing industry in Lebanon is a traditional activity whose considerable importance can be measured in terms of number of firms, workforce, investment, and export potential. Its structure is the same as in most developed countries, with a small number of large companies, a few medium-sized companies, and the bulk of the industry composed of small entities operating independently, but cooperating informally with each other. The industry traditionally employed large numbers of skilled and semi-skilled staff, mainly female. Increased automation and productivity are reducing the requirement for unskilled and, to some degree, semi-skilled workers.

The potential of apparel manufacturing in Lebanon depends mainly on the country’s manufacturers. In producing a complete range of products, including high value-added “fashionable” items, they are traditionally known to draw upon their good taste and fashion-sensitivity, creative talents, know-how, professionalism, and business acumen. The manufacturers also depend on the availability of a trainable workforce and a skilled labour environment. The exposure and sensitivity of the Lebanese consumer to fashion and quality has helped in developing these features of the supply chain.

The Lebanese apparel industry has been experiencing drastic changes since the mid-1990s due to the major challenges it has been facing in the areas of export markets, investment levels, skilled labour, and profitability. In the face of these challenges, the industry has had to endure long periods of restructuring, and change that in many instances is still ongoing. Most enterprises visited were producing for the domestic market, although many had exported in the recent past. Apparel manufacturing in general has lost its leading position on the export market, and may be losing it locally too. With over capacity an all too evident feature of the domestic market, manufacturers face cut-throat competition as they fight for their share of a limited market.

Against this backdrop, mergers and sell-offs proceed apace. More importantly, smaller scale and uncompetitive businesses are being driven out. When they are laid off, many skilled labourers open small workshops servicing larger enterprises at competitive prices through subcontracting or other informal forms of cooperation. This enables the remaining firms to survive the tough competition and gives them a breathing space during which to plan future operations. This phenomenon seems to be spreading and is gradually becoming part of the restructuring process. As such, growing small regions in Lebanon were seen to enjoy reasonable levels of informal cooperation, and, consequently, the potential for cluster or network development. These regions include the Dora - Bourj Hammoud area, the Beirut Southern Suburb area, and the Jebel Mohsen area in Tripoli.

Consequently, there is some evidence that this painful transition is beginning to produce some positive outcome which might, eventually, result in a revitalized, but very different, sector: one based on high skill levels, new technology, niche markets and high margin products targeting the upper segment of the export and domestic markets. The restructuring and revitalization process cannot be effected by the individual enterprise. It must be a collective process involving all stakeholders, the majority of them SMEs. Successful experience in other developed and developing countries and regions is characterized by formal collaborative support frameworks in the form of clusters, networks, or other self-help groups.

While the “fashion” side of the sector in Lebanon has always enjoyed a relatively high profile, the more downmarket producers have in general been losing their leading position on domestic and export markets. Their market share has been declining as a result of competition from low-cost products. Concurrently, the high value-added fashion sector is on the ascendant, and increasingly being driven to establish brands. This haute couture segment, which has also been growing relatively fast over the past 5-10 years, may help Lebanon to recover the reputation for fashion that it once enjoyed in the region, and which it is apparently beginning to gain in the international market as well.

Lebanon is becoming a well-known regional centre for the production of haute couture wedding dresses, high value fashion garments, and other fashion products. This sub-sectoral activity has expanded in large part in response to growing demand from well-off customers from nearby countries who come to Beirut for good quality or haute couture garments. The trend is to an extent reinforced by the international reputation of many Lebanese haute couture designers. The fashion segment of apparel manufacturing thus enjoys a unique opportunity to regain its prime position on the regional market, and simultaneously to capture more of the international markets.

This is a big task that requires collaboration and initiative on the part of stakeholders. Apparel manufacturers must make substantial efforts to adjust to the emerging new dynamics of the international market and the “open frontiers” trade policy that is expected to be implemented locally in the near future. Enterprises must improve their competitiveness if they are to survive the bruising competition and take advantage of new opportunities on the international market. To succeed in this endeavour, they have to realize their “collective efficiency” by working together within a formal cooperative support framework. A cluster approach is one such vehicle.

The outlook for apparel manufacturing in Lebanon depends primarily on the economy in general, as garments sales closely track real economic growth. Factors expected to gain importance for the future of the sector include the following:

(a) Economic restructuring: Mergers and acquisitions, closures and a decline in start-ups will begin to shape a more mature industry. A large percentage of its export-generated revenues will be shared by a smaller number of apparel firms;

(b) Technological innovation: As they increasingly eschew traditional mechanical techniques in favour of digital technology, apparel firms take advantage of new equipment and processes to increase productivity. Many available technologies allow more specialized targeting and personalization (as in the manufacture of jeans for example). These are still in the early stages of use and will probably be further developed;

(c) Business expansion: Over the past few years, apparel businesses in developed economies have moved more and more into ancillary services beyond traditional CMT (cutting, making, trimming). These services include data asset management, order fulfillment and inventory management, design services, and new e-commerce services. This expansion has enabled many manufacturers to become full-service providers for their customers, enhancing revenues and profits.

At the same time, technical developments caused an over-capacity, leading to excessive competition, falling prices, fewer firms and business restructuring. Globally, there will be an increase in ISO certified plants, which will generate an increasingly urgent need for more Lebanese plants in all sectors to meet ISO standards. There will be an increasingly acute need for training and courses on design, pattern cutting and niche market production techniques, and developments in IT. The dissemination of technical information and a commitment to e-commerce would be additional developments.

The changes expected to occur in the apparel industry can be outlined as follows:

(a) Customers in this sector will require quick response and just-in-time deliveries, with short production runs. Firms should be ready to supply good quality “fashionable” goods under these conditions;

(b) The diversification of media and high exposure of local consumers to “fashion” and new lifestyle trends will probably depress demand for conventional products;

(c) Over-capacity will throw supply and demand out of balance, and firms may suffer from severe competition and lower prices;

(d) Use of effective management information systems may increase, allowing for accurate compilation of data, including, for example, data to enable regular monitoring of key performance indicators.⁶⁰

Management skills are critical factors in both success and failure. Cash flow management, niche strategy, pre-ownership experience, education, delegation, and simple organizational structure have a crucial bearing on success (or failure).

⁶⁰ Important ratios include: margin; AV (added-value)/employee; AV/cost of labour; return on sales; return on capital employed; the most profitable products and product mix must be identifiable; and performance must be measured in a constant drive to enhance productivity by reducing costs and adding value.

VI. A FRAMEWORK FOR FASHION CLUSTER DEVELOPMENT

The general objective of this initiative is to promote the culture of inter-firm cooperation in a competitive business environment and assist SMEs in developing different forms of collaborative inter-firm relationships, in order to achieve collective competitive advantage. This involves identifying, restructuring, and modernizing focused groups of SME firms involved with all stages of the production line, and extending support and assistance in the formation of SME networks and clusters. This endeavour encourages geographically clustered SMEs in the same sub-sector to identify and prioritize their own specific needs. Partner organizations in this project aim, in the final analysis, at building capacities and encouraging institutions and private sector firms to join in the undertaking, empowering them to perpetuate and expand it.

A. A FASHION CLUSTER

It is evident from the findings of the study that inter-firm collaborative efforts already exist in various informal, ad-hoc forms. Such cooperative efforts involved subcontracting, leasing of machines, sharing information, and lobbying for policy support. Relations between SMEs and large firms are confined to ad-hoc subcontracting arrangements. It was also observed that there were cases of cooperation between suppliers of machinery and producers of apparel, as well as between raw materials suppliers and producers, and both relationships resulted in improved product quality and design. There is, however, little inter-firm cooperation in marketing; marketing, in fact, constitutes an important area for joint efforts, as it helps SMEs collectively to meet high volumes of demand in the export market and therefore enhance their competitiveness.

If a cluster is to be developed in Lebanon, firms will have the opportunity to work together and concentrate on high value-added products, which require high levels of skill. These include wedding dresses, baby wear, ladies' haute couture, casual wear and sportswear. These products can be targeted to the upper segment of both the local and export markets.

The researchers were surprised to discover that these relationships are taking place across the country, with a manufacturer in Greater Beirut subcontracting part of the production process to workshops in Northern Lebanon, for example. Lebanon is therefore perceived from a manufacturing perspective to be a single geographical area. One exception is found in Jebel Mohsen, in Tripoli, where a membership-based, geographically concentrated potential "cluster" is at an embryonic stage. It is formed around the Syndicate of Apparel Manufacturers, which consists of members who pay dues and are committed to a certain level of joint problem solving. The scope of cooperation extends along the production and the demand lines, bringing together producers, producers and suppliers, producers and BDS providers, producers and academia, producers and importers, and so on. However, these relationships do not run deep. They are ad-hoc, unsystematic, informal, and there is no formal commitment between the parties concerned. But cooperation exists, and seems to be deepening in response to increased difficulties faced by the sector.

The aim of the project is to enhance these cooperative efforts by SMEs and help them improve the competitiveness of their exports in the international market. Although many interviewees stressed the importance of developing deeper and more institutionalized cooperative relationships, the study reveals that small and medium-sized Lebanese apparel firms are not by themselves able to advance beyond existing levels of cooperation. They need to formulate more sustainable, committed, formal institutional frameworks of cooperative support, such as clusters or networks. Lessons drawn from other international experiences show that SMEs alone cannot pursue this task, and that there is a need for intervention by an independent party to assist SMEs to formulate such frameworks.

It is evident from the study that the future of apparel manufacturing in Lebanon lies in the upper-end, high quality, fashion segment of the market. As apparel manufacturing in the country is undergoing restructuring and changes, evidence is emerging of some gradual positive outcomes evolving, offering the eventual prospect of a revitalized, but very different, apparel sector. Two concurrent trends seem to be on the rise. A high value-added fashion sector of manufacturing is making headway, and there is an increasing drive for the establishment of brands. The haute couture segment has also been expanding, and may create spillover effects that would enhance the fashion segment of apparel manufacturing. Currently, Lebanon is

becoming well-known for producing haute couture wedding dresses, high value fashion garments, and other fashion products. The international reputation of many Lebanese haute couture designers is helping to enhance the fashion image of Lebanon. This is a unique opportunity which manufacturing entrepreneurs should seize. The objective of the joint initiative is to assist apparel manufacturers to benefit from this opportunity.

B. A FRAMEWORK FOR ACTION: NEXT STEPS

Implementation of the joint project in Lebanon is effected in four phases. The following are the main components of these phases.

1. *Phase One: identification of the sector and implementation of the diagnostic study*

The diagnostic study on apparel manufacturing in Lebanon is being undertaken as part of phase one of the initiative. The study aims to learn about existing structures of the sector-based SME groupings, identify issues related to their sub-sectoral development, and draw lessons about how to develop initiatives together with local firms so as to deepen their mutual linkages and improve their performance. Within this phase, an awareness campaign was also launched, to sell the concept of clusters and networks development as a process to the business community and government. Several meetings were conducted with active local counterparts, associations, institutions, and government offices, to identify jointly the cluster/network. The findings of the diagnostic study will be discussed in a meeting with counterparts and stakeholders, including relevant BDS providers, government officials, the resource institutions and academia. The study should help enterprises set the objective of the initiative, through identification of the needs of the ‘group’.

During this phase, a steering committee was formed, composed initially of ESCWA and its local counterpart, EWTOU at the Federation of Lebanese Chambers of Commerce, Industry and Agriculture, and which would at a later stage include representatives of other stakeholders, including service providers, academia, and government. The function of the committee is to oversee planning and implementation of the various phases of the project, including: selection of the target sectors, to be undertaken within the given local, regional and global context; mapping of the sector; giving the project a label (namely, a distinctive identity, such as ‘environmentally-friendly’, ‘women empowering’, or ‘trend-setting’); and selecting the cluster development broker (CDB).

2. *Phase two: Selection of firms of the cluster and building trust*

Phase two of the project is concerned with the selection of the founding members of the group. These founding firms, which could be described as the ‘trail-blazers’, will help to develop the Vision Statement of the ‘group’. The vision will emerge through a process of consensus; it will serve as a tool for bringing firms together (see phase three).

The membership of the cluster/network need not be large, as it can start with 10-25 members. A cluster/network broker will be recruited for 2-3 years to facilitate the early development of the cluster. This broker, or cluster development agent (CDA) will have to conduct specialized studies identifying the precise needs of member enterprises for better marketing and product development and the needs of BDS providers as they endeavour to improve service provision. The CDA is selected on the basis of a set of criteria. Over and above expertise and credibility, he must have vision, leadership qualities, considerable energy and perseverance, objectivity and flexibility in dealing with people and complex situations. The CDA also initiates the building of trust among enterprise managers/owners who are candidate members of the ‘group’. Trust building is an important component of cluster development; it is an ongoing process that also encompasses relationships between firms and BDS providers, suppliers, banks, and government.

The process of establishing trust begins with identification of the critical pressure point (PP), which is the driving force of the cluster. One or even two PPs may be identified, so that trust can be built around those points. Trust need not be absolute, rather, it is of a functional nature. The process of trust building includes helping enterprises to identify and articulate the needs of the cluster, including the need for BDS providers and resource institutions. One of the developmental aims of the initiative is to develop state of the

art service provision and professional organizations for the sector (namely, chambers of commerce, producers' associations). In this phase, and as a result of trust building, the founding members of the 'group' are identified and the objective of the initiative is set.

3. Phase three: Developing a vision of the cluster, preparing action plan and plan of implementation

In phase three, an action plan will be prepared based on the findings of the diagnostic study. The action plan will list activities within a time framework, and crystallize the priorities of the 'group'. The action plan will also identify potential areas of cooperation between firms (e.g. product development, technology upgrading, marketing, and so on). Individual action plans should be formulated for the 'group', the institutions and the implementing agency.

Building vision is the key to the success of the initiative. The vision is a means of bringing firms together; at the same time, it is the result of bringing those firms together. To build vision is to build the constituency needed to sustain the group. Vision connects the targets towards which the cluster is moving.

An implementation strategy is the logical extension of the action plan. This strategy will consist of long, medium, and short-term implementation plans, with flexibility the keynote. The strategy will include seminars for vision building of members of the 'group', training programmes for the development of BDS providers, CDAs, and project staff, and learning trips, visiting successful clusters in different countries. The strategy will also include the establishment of an internal system for monitoring and evaluation of the cluster, mapping of the skills of the cluster, mapping of the potential of educational institutions and technical/vocational schools, mapping of the labour of the cluster (for poverty reduction purposes), income, skills, and education. The strategy should include an internal MIS for the cluster project.

4. Phase four: Assessment of achievements of the project

In consultation with the steering committee and the stakeholders, a methodology for the assessment of the performance and achievements of the cluster must be formed and the project assessed accordingly. This assessment will make reference to useful experiences elsewhere in the region, with a view to replication of the project in other sectors or countries.

C. PRINCIPLES GOVERNING THE JOINT CLUSTER/NETWORK DEVELOPMENT INITIATIVE⁶¹

A plan or a framework on its own is not enough. A clustering endeavour should have a business philosophy, or be based on good business practices. Since the joint initiative in Lebanon was started as a pilot project, it was necessary for us to benefit from relevant experience in the field, especially in the design of the project. In this respect, lessons were drawn from different quarters, particularly UNIDO. UNIDO publications were very useful in identifying the main underlying principles that should govern the design of cluster/network development initiatives. Several of the main principles are presented in a selection, as follows:

(a) Demand orientation: An important principle in the design and provision of networking development services is demand orientation. The intervention must be designed after a thorough analysis of the needs of the client base and the surrounding economic environment from which resources can be tapped to satisfy those needs.

(b) Business orientation: In networking, the initiative should aim at visible improvements in the economic situation and prospects of participating SMEs. Networking should not be a pure exchange of

⁶¹ Based on UNIDO's various publications and reports in the field; *Industrial Clusters and Networks: Case Studies of SME Growth and Innovation*, 1995; *Principles for Promoting Clusters and Networks of SMEs*, 1995; *The Italian SME Experience and Possible Lessons for Emerging Countries*, 1997; *SME Cluster and Network Development in Developing Countries: The Experience of UNIDO*, 1999; *Strengthening Indian SME Clusters: UNIDO's Experience*, 1999; *Cluster Development and BDS Promotion: UNIDO's Experience in India*, 2000.

information or an end in itself but rather a means to achieve genuine economic advantages. Furthermore, networking must confer upon the group a new competitive advantage that the enterprises alone could not reach. Business talks should be translated into profitable actions and lead to positive structural, namely permanent, changes in the enterprises. Indeed, a network will not completely fulfill its potential unless it generates a new competitive advantage capable of generating new business.

(c) Focus on production: The ultimate objective of clustering/networking is to improve the business prospects of SMEs by helping them to achieve long-term changes in their production capability and organization. This principle points to the importance of process and product innovation and structural improvement, in contradistinction to merely temporary success, such as an increase of sales resulting from occasional participation in a fair. It could be argued that a new market opportunity stemming from joint participation in a fair to use a similar example might spur the creation of networks and the development of cooperative relationships among members. However, experience has shown that such a transition rarely occurs automatically. In some projects, the networks have been exposed to market opportunities (especially for export) that they could not fulfill for lack of organizational capabilities and production capacity. Supporting a network, therefore, must involve not only the search for new market opportunities, but also provide the assistance required to restructure the network's production organization to respond to new markets in a timely manner, with the right quantities and quality.

(d) Focus on SMEs: This refers to the fact that, even though networks may involve other partners, such as large firms or retail chains, the primary beneficiaries need to be the SMEs.

(e) Multidimensional concept: Networking is a multidimensional concept and does not apply to enterprises alone. Institutional networking, networking between the private and public sectors, and country networking are equally important concepts in UNIDO's activities. The idea is to specialize and cooperate to the maximum extent, so that each actor in the economic system can dedicate itself to core functions and perform them to the best of its abilities. In practice, this principle translates into the natural evolution of networking units that specialize in strategic functions, decentralizing the implementation functions to other network brokers (after an initial period, during which they centralize all such functions). This principle implies a suitable division of labour among network brokers and BDS providers, whereby the network brokers do not attempt to solve all the problems of the enterprises but help the enterprise to identify other service providers which may be of assistance.

(f) People involved: The key resource in networking initiatives is the people involved: policy makers, brokers, and other service providers. Four factors can increase the likelihood of project success: people's ownership, empowerment, skills and incentives.

At all levels, the project actors must feel they own the project, and feel it is in their interest to execute it. To this end, it is important to invest adequately in raising awareness at all levels, to involve local actors in project design, and encourage continual feedback so as to improve project implementation. Furthermore, all actors should be empowered to act. In other words, those involved must have the leverage, credibility and resources to play their role. Actors involved should also have the right skills to act. In addition to an appropriate academic and professional background, the skills of network brokers, for instance, must encompass such invaluable "extra-curricular" skills as the capacity to build teams, deep knowledge of local social rules and an openness to the establishment of new contacts.

Network brokers must possess a rare combination of technical background, business mentality and social sensitivity to produce commercially viable projects of benefit to all participants. In short, network brokers must have the right motivation to look for clients and help them improve their business (in addition to the leverage and skills to act). Participants too must be driven by the right motivation and incentives.

(g) Training and exposure to practices: One of the crucial ways to support these key actors is through provision of the necessary training and exposure to best practices. This means continuous training, as well as the need to diffuse information related to best practices to orient the decisions of networking agents. A valuable training component would consist of inviting other agents, who have implemented successful

networking projects elsewhere, to describe their experiences to the networking agents. Such sessions are described by UNIDO as “Joint Learning Programmes”.

In addition, a series of systematized working tools are needed, to facilitate the work of the network brokers and accelerate the transfer of knowledge to new networking agents. Other instruments include a practical manual for network brokers and a set of monitoring and evaluation indicators for networking projects. All these instruments are meant to stimulate creative thinking rather than impose rigid boundaries.

(h) Private-public investment: A combination of private and public investment appears to be the best way to finance networking development services. An important fact which appears to militate against an exclusive reliance on the market is that networking development services aim to redress certain market failures: the market cannot therefore be expected to cover all their costs. This does not, however, mean that networks need to rely entirely on public funding. The balance between private and public funding need not remain constant over time. As the initiative progresses and the impact becomes more visible, private enterprise takes on a greater share.

(i) Evaluation criteria: There is a need for the application of carefully designed evaluation criteria to cluster/network development services. While quantitative indicators are always to be favoured, there are three aspects to consider: (i) the scarcity of reliable, comparative data on the performance of small firms; (ii) the understandable unwillingness of entrepreneurs to release confidential data about their businesses; and (iii) purely quantitative measures often fail to take into consideration phenomena like institutional capacity building or indirect results such as those resulting from the work of later generations of brokers at subsequent stages.

On the other hand, despite the difficulties related to quantitative measurement of service impact, the gathering of objective data is essential not only for evaluating the return on the investment made by the financier but also to indicate the possibility of charging private sector beneficiaries who, understandably, need to know with a certain degree of objectivity what benefits they can expect when they buy certain services.

(j) Market cost recovery: The introduction of elements of market cost recovery should be pursued as early as possible so that the beneficiaries do not become accustomed to subsidies. This reduces the risk that the SMEs become dependent on the service provider. Progressively increasing the share of costs to be borne by enterprises is one way to reduce such a risk. It is the task of the network brokers to lead the networks towards a process of self-management and to develop an autonomous capacity to identify new collective strategies, implement the joint projects and liaise with SME support institutions.

(k) No single and pre-defined path: Lastly, in the implementation of cluster/network promotion initiatives there is no single and pre-defined path that can be replicated effortlessly across countries, regions and industrial sectors. These initiatives need to be flexible and in tune with the characteristics of the environment where SMEs operate. The elements that comprise the intervention are invariably: network, firm, institution, and policy. However, the “dosage” and “sequence” need not be the same for all projects and all countries. In UNIDO’s experience, the bottom-up approach appears to work best, fostering an entrepreneurial vision and supporting the initiatives of local actors to realize it.

VII. CONCLUSIONS

Today, support policies targeting SME inter-firm collaborative systems or frameworks represent a way to meet the new challenges posed by globalization and liberalization. They are a means to promote a thriving private sector and to secure more sustainable growth for SMEs. This goes well beyond traditional development policy objectives of survival and job creation. In clusters or networks, SMEs can overcome disadvantages related to their isolation, size, weak capital base, access to information and finance, and volume and quality of production. Through these collaborative forms they can improve their competitive edge and efficiency. Indeed, SME problems are not so much in their size as in their isolation. With changing competitive conditions on the international market, SMEs in clusters, far from being handicapped by size, have the advantages of flexibility and responsiveness, and they can be more competitive than larger firms.

Although there is much evidence that SMEs could gain significant benefits from inter-firm cooperation, it seems that clusters and networks do not usually develop on their own, particularly in developing countries. However, these problems can be addressed through programme initiatives to develop these collaborative systems. In these initiatives, external interventions from independent agents help a group of SMEs to overcome these problems and assist them in developing collaborative manufacturing.

Although international experience in cluster development is diverse, commonalities exist from which lessons can be drawn. Methodologies on cluster development are normally customized, as flexibility and innovation are required. This is because different environments require different approaches that are adaptive to local needs. Furthermore, customized methodologies help to build national capacities.

Clustering is a slow process. Successful initiatives are those that support frameworks for inter-firm collaborations which lead to the formation of sustainable clusters and have a positive impact on the business community. As such, cluster development programmes should be holistic and aim at making inter-firm relationships a developmental phenomenon.

In countries of the ESCWA region, SMEs alone cannot face the challenges of globalization. Accordingly, inter-firm collaborative efforts—in the form of clusters, networks or other self-help groups—can help SMEs gain dynamic collective competitiveness and increased efficiency. Governments in the region should enact policies that support such initiatives, while international organizations, NGOs and donor agencies should investigate the possibility of extending technical and financial assistance.

For this reason, ESCWA launched a project with UNIDO on cluster development in the ESCWA region. Lebanon hosted the pilot activity, which was conducted in partnership with EWTOU at the Federation of Lebanese Chambers of Commerce, Industry and Agriculture and the Lebanese Association of Textile Owners. The activity involved preparing a diagnostic study of SMEs engaged in apparel manufacturing so as to identify ways to overcome challenges posed by globalization and changes in the international market, with a view to determining how cluster development may help.

Apparel manufacturing is an important SME activity and economic sector in several countries of the ESCWA region, including Lebanon. Developing countries, including countries of the region, enjoy a competitive advantage in the industry, but have had to adapt in response to the changing dynamics of the international market over the past decade. Many countries in the region depend upon textiles and apparel exports for foreign exchange earnings. Yet the region continues to suffer from a large balance of trade deficit in textiles and clothing. Observed from a different perspective, the selfsame deficit represents potential growth for the sector in the region. The extent to which this potential can be realized will depend on the ability of regional suppliers to compete on the international market and to take advantage of new opportunities and innovative marketing approaches, particularly those that involve inter-firm collaboration.

The diagnostic study prepared in Lebanon shows that the apparel manufacturing sector has significant potential that has accumulated over the years. The country's manufacturers are traditionally known to have taste and fashion-sensitivity, know-how, professionalism, commercial and creative talents, and a complete range of products that includes high value-added fashion items. In addition, Lebanon has a skilled and

trainable workforce. The exposure and sensitivity of the Lebanese consumer to fashion and quality has helped to develop these features of the supply chain.

Lebanon has the potential to become a well-known regional centre for producing haute couture wedding dresses, high value fashion garments and other fashion products. The sector has expanded in response to growing demand from well-off customers from nearby countries who come to Beirut for good quality or haute couture garments. This has created an enabling environment for apparel manufacturers in Lebanon due to spillover effects generated by an improved regional reputation for style and quality, and the benefits derived from increased international exposure. The fashion segment of apparel manufacturing should take advantage of this new and unique opportunity and try not only to regain its prime position on the regional market but to replicate that progress on the international markets.

The apparel industry has had to endure long periods of restructuring to meet the new and changing requirements of the international market. In many instances, restructuring is still ongoing. However, there is evidence that this painful transition is beginning to produce positive effects that might eventually lead to a revitalized, but very different, sector: one that is based on high skill levels, new technology, niche markets and high margin products that target the upper echelons of the export and domestic markets. This will not only strengthen the enabling environment for high-end fashion designers, but will fortify the competitiveness of other manufacturers as well. Indeed, as the sector restructures, new relationships will be forged between suppliers, manufacturers, marketing outfits and retail providers. Inter-firm collaborative frameworks—including, clusters, networks or other self-help groups—can facilitate this transition and help manufactures to seize these opportunities and to build upon their potential.

Having completed the diagnostic study, the next step for the ESCWA/UNIDO/EWTOU initiative in Lebanon is to hold a general meeting to share and discuss the findings with stakeholders, business development service providers, government officials, resource institutions and academics. The feedback obtained from the meeting will provide input in planning the second phase of the project, which involves identifying the target group and formulating the Action Plan. During the second phase, the collaborative self-help group is chosen. This is an important step, since it involves choosing the founding members, including the ‘trail-blazers’. Another important step is the appointment of a cluster/network broker who will be responsible for guiding the ‘trail-blazers’, to formulate their plan of action to address issues identified. The broker will then prepare an implementation plan and manage its execution. The final stage includes assessment of the achievements of projects.